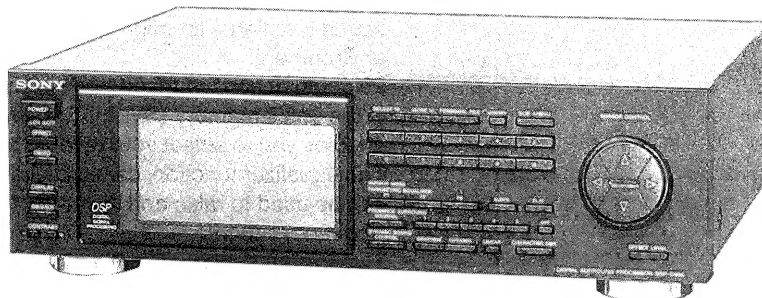


SDP-D905

SERVICE MANUAL

*AEP Model
UK Model
E Model*



This set is a Digital Surround
Processor block of the Following models.
LBT-D905CD

SPECIFICATIONS

Frequency response	2 Hz to 20 kHz ± 0.5 dB (with digital input)
Total Harmonic Distortion	Less than 0.008 % (with digital input)
Signal-to-noise ratio	More than 110 dB (with digital input)
General	
Power requirement	240V AC, 50/60 Hz (UK model) 110V-120V/220-240V AC (E, Saudi Arabia models) 220-230V AC, 50/60 Hz (AEP, Germany, Italian models)
Power consumption	18W (AEP, Germany, Italian, UK models) 19W (E, Saudi Arabia models)
AC outlet	1 unswitched, 100W
Dimensions	Approx. 355 \times 107 \times 315.5 mm (w/h/d, including projections)
Weight	Approx. 3.6 kg
Supplied accessories	Audio connecting cords (2) Optical cord (1)

Design and specifications subject to change without notice.

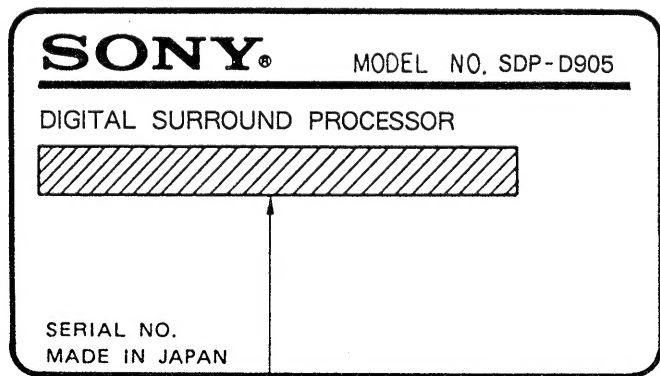
DIGITAL
SURROUND PROCESSOR
SONY[®]

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
SPECIFICATIONS		1
1. GENERAL		3
2. ADJUSTMENT		14
3. DIAGRAMS		
3-1. Circuit Boards Location		14
3-2. IC Discription		15
3-3. Brock Diagram		17
3-4. IC Brock Diagrams		19
3-5. Printed Wiring Boards – Main Section –		20
3-6. Schematic Diagram – Main Section –		23
3-7. Semiconductor Lead Layouts		27
3-8. Schematic Diagram – Panel Section –		28
3-9. Printed Wiring Boards – Panel Section –		31
4. EXPLODED VIEWS		
Overall Section		34
5. ELECTRICAL PARTS LIST		36

MODEL IDENTIFICATION

– Specification Label –



AEP, Germany, Italian models : AC220 – 230V~50/60Hz
 UK model : AC240V~50/60Hz
 E, Saudi Arabia models : AC110 – 120V/220 – 240V
 ~50/60Hz

Using the Sound Manipulation Features

This unit is equipped with three sound adjustment functions – an equalizer function, a surround function and a dynamic sound function – for improving the sound in your listening environment.

20 combinations of these three functions are already preset in the unit's memory (SELECT 10 and MORE 10) and this enables you to select your favorite sound field easily.

The equalizer function, called Digital Parametric Equalizer, can be used to raise and lower the levels of specific frequency ranges.

The surround function, called Digital Presence Surround, can be matched to the music genre or source to effectively reproduce a feeling of "being there."

The dynamic sound function, called Digital Dynamic Sound, can be used to give a powerful feeling to music when listening at low volume levels and also reduce strident noise. Making full use of these three functions allows you to create a variety of different sounds and effects and to maximize your music listening enjoyment.

Using the Sound Manipulation Features

Obtaining Digital Surround Processor Effects

Press EFFECT so that the indicator is turned on. Digital surround processor effects can not be obtained if the indicator is not turned on.

Compare the results by switching EFFECT on and off. With the indicator turned on, sounds with the processor effects can also be recorded on a tape in a cassette deck.

Adjusting the Effect Level

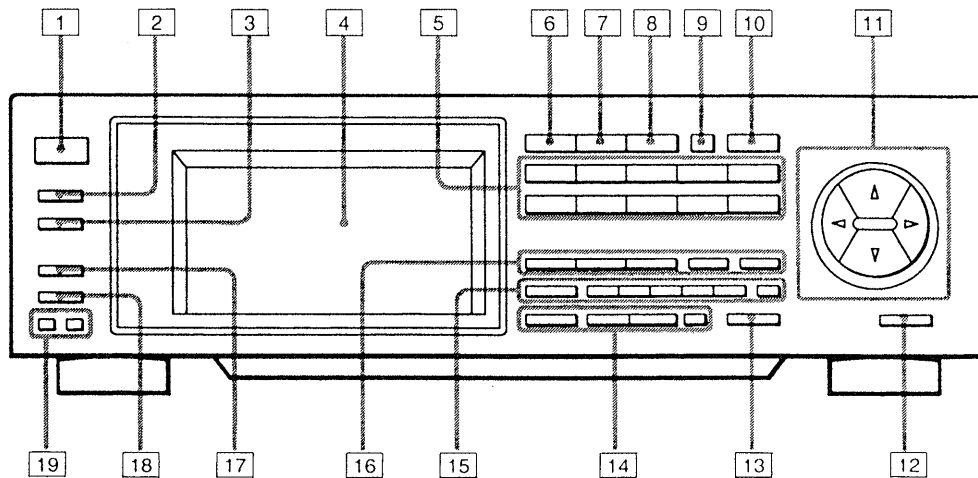
The degree of the processor effects on a selected source can be adjusted within the range of 0% to 100% in 20% intervals.

Press EFFECT LEVEL so that "EFFECT LEVEL" is indicated on the display, and then press ▲/► of the CURSOR CONTROL buttons to increase the effect level or ▼/◀ to decrease it.

SECTION 1 GENERAL

This section is extracted from
instruction manual.

Location of Controls



Refer to the page indicated in ●.

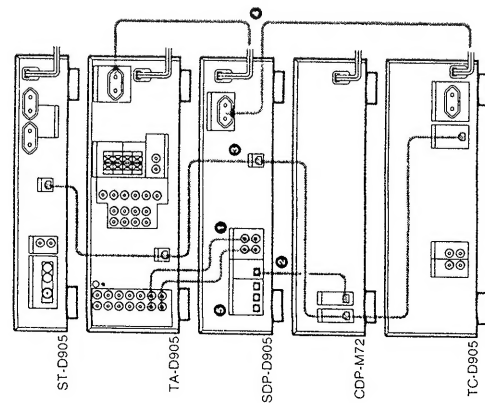
- 1 POWER switch
- 2 EFFECT button and indicator 10
- 3 DEMO button 9
- 4 Display
- 5 Numeric buttons used with SELECT 10/MORE 10/PERSONAL FILE/SUB MENU.
- 6 SELECT 10 button and indicator 14
- 7 MORE 10 button and indicator 14
- 8 PERSONAL FILE button and indicator 28
- 9 MEMORY button 28, 30
- 10 SUB MENU button 32
- 11 CURSOR CONTROL buttons 10, 19, 27
- 12 EFFECT LEVEL button and indicator 10
- 13 CHARACTER EDIT button and indicator 30
- 14 DYNAMIC SOUND buttons
CONTROL button and indicator 26
COMPRESS button 26
EXPANDER button 26
LINEAR button 26
- 15 PRESENCE SURROUND buttons
CONTROL button and indicator 22
Numeric buttons 23
OFF button 22
- 16 PARAMETRIC EQUALIZER buttons
F1/F2/F3 (frequency) buttons and indicators 18
SLOPE button 18
FLAT button 20
- 17 DISPLAY button 12
- 18 DIMMER button 12
- 19 CONTRAST + / - buttons 12

Instalação

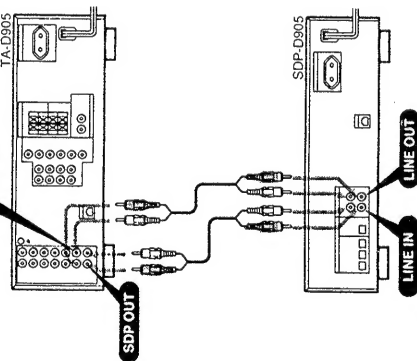
Installation

Instalación

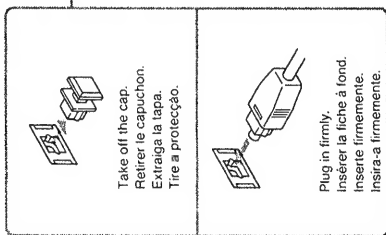
Instalação



1 Audio connecting cord
Cordon de liaison audio
Cable conector de audio
Cabo de ligação de sinais de áudio



2 Optical cord
Cable optique
Cable óptico
Cabo óptico



Take off the cap.
Retirer le capuchon.
Extraiga la tapa.
Tire a protecção.

Plug in firmly.
Insérer la fiche à fond.
Insira-a firmemente.

3 Control cord (supplied with ST-D905)

Cable de commande (fourni avec le ST-D905)
Cable de control (suministrado con el ST-D905)
Cabo de controle (fornecido com o ST-D905)

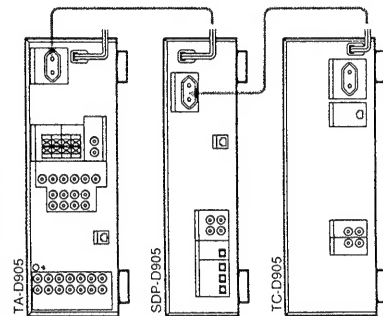
This connection allows you to control this unit with the remote commander supplied with ST-D905.

Ce branchement vous permet de piloter l'appareil avec la télécommande accompagnant le ST-D905.

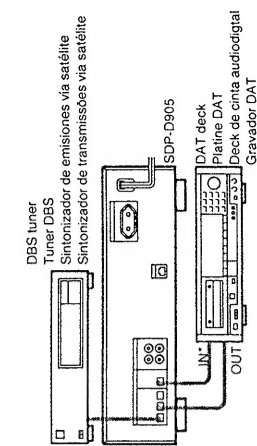
Esta conexión le permitirá controlar esta unidad con el telecomando suministrado con el ST-D905.

Esta ligação possibilita o controle deste aparelho com o telecomando fornecido com o ST-D905.

4 AC power cords
Cordons d'alimentation secteur
Cables de alimentación
Cabos de alimentação CA

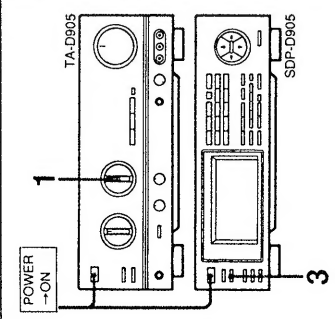


5 Optional equipment connected with optical cords
Equipement en option raccordé avec des câbles optiques
Equipos opcionales conectados con cables ópticos
Equipamento opcional ligado com cabos ópticos.



Digital surround processor effects can not be recorded with this connection.
Les effets produits par le traitement numérique de l'ambiance ne peuvent pas être enregistrés par cette connexion.
Los efectos del procesador perimétrico digital no podrán grabarse con esta conexión.
Os efeitos de processamento digital perimétricos não poderão ser gravados com esta ligação.

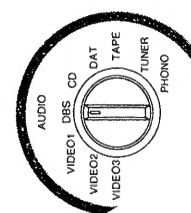
Demonstration Mode



1

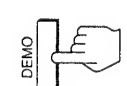
3

1 Select a source
Sélectionner une source.
Seleccione una fuente.
Selecione uma fonte.



2 Play the source
Jouer la source.
Ponga la fuente en reproducción.
Reproduza a fonte.

3



DEMO

This unit is provided with a demonstration mode to allow you to get a taste of the rich variety of effects possible with the three functions mentioned above.
Before using the unit to make adjustments to the sound, use the demonstration mode to experience the various effects while watching the changes on the display and listening to the differences in the quality of the sound produced by these effects.

To stop the demonstration mode
Press DEMO again or any button other than the POWER switch.

Arrêt du mode démonstration
Appuyer de nouveau sur la touche DEMO ou sur toute autre touche que l'interrupteur d'alimentation POWER.

Para cesar el modo de demostración
Vuelva a presionar DEMO o cualquier otra tecla, excepto el interruptor POWER.

Para interromper o modo de demonstração
Pressione DEMO novamente ou qualquer outra tecla, excepto POWER.

8

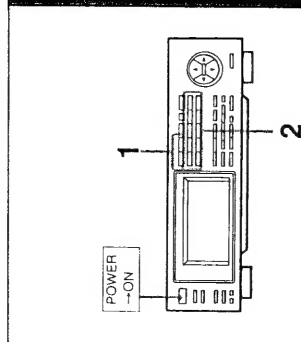
9

—5—

13

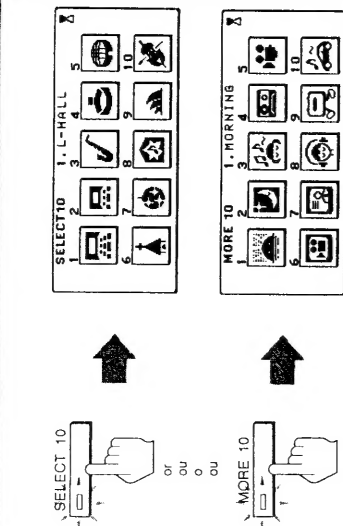
Adjusting the Sound with Preset Settings - SELECT 10/MORE 10

This function allows you to adjust the sound with 20 preset combinations of equalizer, surround, and dynamic sound effects to enable you to set the sound quality to suit your taste and listening conditions.



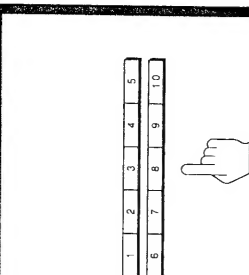
Réglage du son avec les préréglages - SELECT 10/MORE 10

Cette fonction vous permet de régler le son à l'aide de 20 combinaisons de préréglage des effets produits par l'égaliseur, le traitement de l'ambiance et les basses dynamiques pour adapter la qualité du son à votre goût particulier et à votre environnement.



Ajuste del sonido con ajustes memorizados - SELECT 10/MORE 10

Esta función le permitirá ajustar el sonido con 20 combinaciones de efectos de equalización, sonido perimétrico, y sonido dinámico para que pueda ajustar la calidad del sonido a su gusto o de acuerdo con las condiciones de escucha.



Ajustes pré-programados - SELECT 10/MORE 10

Esta função possibilita o ajuste do som com 20 combinações de ajustes no equalizador, processador perimétrico, e compressor/expansor digital. Ajuste o som de acordo com suas preferências e o ambiente do local de escuta.

SELECT 10 Preset Settings

- 1 L-HALL**
Gives the atmosphere of a large hall of which the seating capacity is more than 2000.
- 2 S-HALL**
Gives the atmosphere similar to an instrumental recital held in a small hall.
- 3 JAZZ CLUB**
Reproduces stressed sounds which are most likely created in a location surrounded with solid walls.
- 4 STADIUM**
Gives the atmosphere similar to a performance held in a stadium.
- 5 ARENA(GYM)**
Gives the atmosphere similar to a live concert held in a gym.
- 6 CHURCH**
Produces natural echo most likely created in surroundings such as in a church.
- 7 DISCO**
Reproduces disco-like sounds most likely created in surroundings with a solid floor and walls.

(to be continued)

Préréglages SELECT 10

- 1 L-HALL**
Rend l'atmosphère d'un grand hall dont la capacité dépasse 2000 places.
- 2 S-HALL**
Rend l'atmosphère d'un récital de musique instrumentale dans une petite salle de concert.
- 3 JAZZ CLUB**
Reproduit les sons accentués d'un orchestre de jazz dans un local construit de murs épais.
- 4 STADIUM**
Reproduit l'atmosphère sonore d'un stade.
- 5 ARENA (GYM)**
Rend l'atmosphère musicale d'un concert se tenant dans un stade couvert.
- 6 CHURCH**
Produit l'écho naturel d'une église.
- 7 DISCO**
Rend des sonorités similaires à l'ambiance créée par un lieu au sol et murs résistants.

(à suivre)

Ajustes memorizados en SELECT 10

- 1 L-HALL (Sala grande)**
Ofrece la atmósfera de una sala grande con una capacidad de más de 2000 asientos.
- 2 S-HALL (Sala pequeña)**
Ofrece una atmósfera similar a la de un recital instrumental celebrado en una sala pequeña.
- 3 JAZZ CLUB (Club de jazz)**
Reproduce el sonido tenso que suele producirse en un lugar rodeado por paredes sólidas.
- 4 STADIUM (Estadio)**
Ofrece una atmósfera similar a la de una actuación celebrada en un estadio.
- 5 ARENA (GYM) (Gimnasio)**
Ofrece una atmósfera similar a la de un concierto en vivo celebrado en un gimnasio.
- 6 CHURCH (Iglesia)**
Produce el eco natural que suele crearse en ambientes tales como una iglesia.
- 7 DISCO (Discoteca)**
Reproduce sonidos semejantes a los de una discoteca que suelen crearse en ambientes con piso y paredes sólidos.

(continúa en la página siguiente)

Ajustes pré-programados SELECT 10

- 1 L-HALL**
Simula o ambiente de uma grande sala de concertos com capacidade superior a 2000 pessoas.
- 2 S-HALL**
Simula o ambiente de um recital de música instrumental numa pequena sala de concertos.
- 3 JAZZ CLUB**
Reproduz sons nítidos que provavelmente seriam criados em cômodos com paredes sólidas.
- 4 STADIUM**
Simula um ambiente similar a concertos ao vivo num estádio.
- 5 ARENA**
Simula o ambiente similar a concertos ao vivo em sala de desportos.
- 6 CHURCH**
Produz o eco natural que provavelmente seriam criados numa igreja.
- 7 DISCO**
Reproduz características de músicas do género disco, os sons que provavelmente seriam criados em locais com paredes e pisos sólidos.

(continua)

Adjusting the Sound with the Digital Parametric Equalizer

This feature allows you to adjust the sound by raising or lowering the levels of specific frequency ranges.

Réglage du son avec l'égalisation paramétrique numérique

Cette caractéristique vous permet de régler le son en augmentant ou diminuant le niveau de gamme de fréquence particulière

Ajuste del sonido con el equalizador paramétrico digital

Esta función le permitirá ajustar el sonido aumentando o disminuyendo los niveles de gamas de frecuencias específicas.

Ajustes com o equalizador paramétrico digital

Esta característica ajusta o som mediante o reforço ou a atenuação de uma dada gama de frequências.

1: POWER -ON button
2: EFFECT button
3: Frequency range selector (Low, Middle, High)
4: Frequency level slider (F1, F2, F3)

1

EFFECT

1 F1 F2 F3

2

Select the frequency range you wish to adjust
Selectionner la gamme de fréquences à régler.
Selecione la gama de frecuencias que desee ajustar.

3

gentle
doux
suave

moderate
modéré
moderado

steep
prononcé
pronunciada

4

SLOPE

Each time the button is pressed, the slope level changes in 3 stages.
A chaque pression exercée sur la touche, le niveau de pente change selon 3 étapes.
Cada vez que presione la tecla, el nivel de pendiente cambiará en tres etapas
A cada pressionar da tecla, o nível do declive altera-se em 3 estágios.

5

Repeat steps 2 to 4 if the level of another frequency range needs to be adjusted.
Répéter les étapes 2 à 4 si le niveau d'une autre gamme de fréquence doit être ajusté.
Repita los pasos 2 a 4 si necesita ajustar el nivel de otra gama de frecuencias.
Repita os passos de 2 a 4 se necessita ajustar o nível de uma outra gama de frequências.

Approximately 10 seconds after the adjustment, the normal indication will resume.
To restore it more quickly, press the frequency button (F1/F2/F3) which is illuminated.

Button	Frequency range
F1	Low range
F2	Middle range
F3	High range

Environ 10 secondes après le réglage, l'indication originale revient. Appuyer sur la touche de fréquence (F1/F2/F3) illuminée pour la rétablir plus rapidement.

Touche	Gamme de fréquence
F1	Gamme basse fréquence
F2	Gamme moyenne fréquence
F3	Gamme haute fréquence

Aproximadamente 10 segundos después del ajuste, se reanudará la indicación normal. Para reanudarla con mayor rapidez, presione la tecla de frecuencia (F1/F2/F3) que esté encendida.

Tecla	Gama de frecuencias
F1	Gama baja
F2	Gama media
F3	Gama alta

Cerca de 10 segundos após o ajuste, retorna-se a indicação normal. Para obter mais rapidamente a indicação normal, pressione a tecla de frequências (F1/F2/F3) que estiver iluminada.

Tecla	Gama de frequências
F1	Gama baixa
F2	Gama média
F3	Gama alta

Note
If two crests or troughs on the equalizer curve are combined and the peak of the resulting crest or trough exceeds ± 12 dB, "OVER" will be indicated in the display.

Remarque
Si les crêtes et creux de la courbe d'égalisation se combinent de telle sorte que la crête ou le creux dépasse ± 12 dB, l'indication "OVER" est affichée.

Nota
Si dos crestas o senos de la curva de equalización se combinan y el pico de la cresta o el seno resultante sobrepasa los ± 12 dB, en el visualizador se indicará "OVER".

Nota
Se dois picos na curva de equalização forem combinados, e o pico resultante exceder ± 12 dB, OVER será indicada no mostrador.

Using the Digital Presence Surround Effects

By using this unit's various surround effects, you can create a feeling of presence similar to being in a concert hall or stadium.

Utilisation des effets numériques d'ambiance

Lorsque vous utilisez les effets d'ambiance divers vous pouvez créer une atmosphère ressemblant à celle que vous auriez lors d'un concert ou dans un stade.

Empleo de los efectos perimétricos de presencia digital

Empleando los diversos efectos de sonido perimétrico de esta unidad, podrá crear una sensación de presencia similar a la experimentada en una sala de conciertos o un estadio.

Efeito perimétrico digital

Mediante o uso dos vários efeitos perimétricos, pode-se simular a sensação de estar presente numa sala de concertos ou num estádio.

1

2 3

2

3

Select the desired surround effects, referring to the table below.
 Sélectionner l'effet d'ambiance souhaité en vous reportant au tableau ci-dessous.
 Selección el efecto de sonido perimétrico deseado, consultando la tabla siguiente.
 Seleccione o efeito perimétrico de acordo com a tabela abaixo.

1 REVERB 1	Atmosphere of a large concert hall (for classical music)
2 REVERB 2	Atmosphere of a stadium (reverberations from far away)
3 REVERB 3	Atmosphere of a large stone church (long reverberations including high frequency sound)
4 EARLY REFLECTION 1	Sound of live concert
5 EARLY REFLECTION 2	Simulated stereo effect on monaural sources

To cancel the surround effects
Press OFF.

1 REVERB 1	Atmosphère d'une grande salle de concert (pour musique classique)
2 REVERB 2	Atmosphère d'un stade (réverbération lointaine)
3 REVERB 3	Atmosphère d'une grande église de pierre (longue réverbération et son de haute fréquence)
4 EARLY REFLECTION 1	Son d'un concert en "live"
5 EARLY REFLECTION 2	Imite l'effet stéréo sur des sources monophoniques

Annulation de l'effet d'ambiance
Appuyer sur OFF.

1 REVERB 1	Almósera de una sala de conciertos grande (para música clásica)
2 REVERB 2	Almósera de un estadio (reverberaciones procedentes de lejos)
3 REVERB 3	Almósera de una iglesia grande (reverberaciones de lejos que incluyen sonido de alta frecuencia)
4 EARLY REFLECTION 1	Sonido de un concierto en vivo
5 EARLY REFLECTION 2	Efecto estéreo simulado de fuentes monoaurales

Para cancelar los efectos de sonido perimétrico
Presione OFF.

1 REVERB 1	simula o ambiente de uma grande sala de concertos (para músicas clássicas)
2 REVERB 2	simula o ambiente de estádios (reverberação distantes)
3 REVERB 3	simula grandes igrejas com paredes de pedra (longas reverberações incluindo sons de altas frequências)
4 EARLY REFLECTION 1	som de concertos ao vivo
5 EARLY REFLECTION 2	simula o efeito estéreo em materiais monofónicos

Para cancelar os efeitos perimétricos
Pressione OFF.

When operating with the remote commander

The DPS button on the remote commander corresponds to the PRESENCE SURROUND CONTROL button on the main unit. Every time the button is pressed, the surround effects switch in the following sequence:

1 → 2 → 3 → 4 → 5 → OFF

Cuando emplee el telecomando

La tecla DPS del telecomando corresponde a la tecla PRESENCE SURROUND CONTROL de la unidad principal. Cada vez que se presione la tecla, el efecto de sonido perimétrico cambiará en la secuencia siguiente:

1 → 2 → 3 → 4 → 5 → OFF (Ausencia de efecto)

Controle com o telecomando

A tecla DPS no telecomando corresponde à tecla PRESENCE SURROUND CONTROL no aparelho principal. A cada pressionar da tecla, os efeitos perimétricos são alterados como segue:

1 → 2 → 3 → 4 → 5 → OFF

Using the Digital Dynamic Sound

This unit is provided with two digital dynamic sound functions: compressor and expander (noise reduction) functions.

The compressor function is especially effective for making low volume sound more powerful although it can be enjoyed at normal volume levels. Also, it is effective for recording tapes meant for playing in a Walkman or car stereo. Since it has the effect of making low volume sound easier to hear over external noise.

The expander function can reduce disturbing noise between selections recorded on a tape. Therefore it is effective for playing tapes.

Utilisation du son dynamique numérique

Cet appareil est pourvu de deux fonctions de son dynamique: les fonctions de compression et d'expansion (réduction de bruit).

La fonction de compression est spécialement conçue pour rendre des sons de bas volume plus puissants, tout en étant écoutés à un niveau normal. Cette fonction agit tout particulièrement lors de l'enregistrement de cassettes destinées à un Walkman ou une chaîne stéréo pour automobile, car elle rend un son de faible volume plus facile à écouter, malgré les nuisances extérieures.

La fonction d'expansion permet de réduire les bruits gênants entre les plages d'une cassette. Elle est donc particulièrement efficace lors de la lecture de cassettes.

Empleo del sonido dinámico digital

Esta unidad dispone de dos funciones de sonido dinámico digital: funciones de compresión y expansión (reducción de ruido).

La función de compresión es especialmente efectiva para hacer el sonido de bajo volumen más potente aunque pueda disfrutarse a niveles de volumen normal. Además, será efectivo para grabar cintas que deseen reproducirse en un Walkman o en un sistema estéreo, porque tiene el efecto de hacer que el sonido de bajo volumen pueda oírse más fácilmente sobre el ruido externo.

La función de expansión puede reducir el ruido perturbador entre las canciones grabadas en una cinta. Por lo tanto, será efectivo para reproducir cintas.

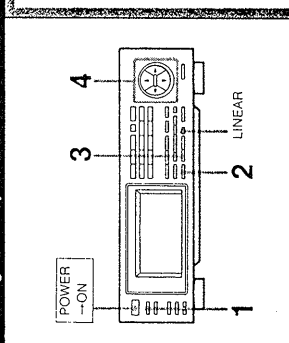
Compressor/Expansor

Este aparelho é equipado com duas funções de som digital: as funções de compressão e de expansão.

A função de compressão é especialmente efectiva para fazer com que sons de baixo volume sejam reforçados a um nível de volume normal. Também, é efectiva para gravação de fitas a serem escutadas em walkmans ou auto-estéreo, já que esta função compensa os sons de baixo volume em relação aos sons externos.

A função de expansão pode reduzir os ruídos de fundo entre músicas gravadas em fitas, sendo portanto efectivo para reprodução de cassetes.

Obtaining the Compressor Function Effect



Función de compresión

Obtención del efecto de la función de compresión

4 Adjust the release time* and efficiency.
Régler la durée de disponibilité* et l'efficacité.
Ajuste el tiempo de liberación* y la eficacia.
Ajuste o tempo de desactivação da função* e eficiência.

3 COMPRESS

2 DYNAMIC SOUND CONTROL

1 EFFECT

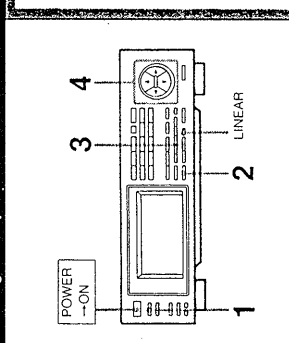
Lengthen the release time.
Augmentation de la durée de disponibilité.
Alarga el tiempo de liberación.
Aumente o tempo de desactivação da função.

Shorten the release time.
Diminution de la durée de disponibilité.
Acorta el tiempo de liberación.
Encurte o tempo de desactivação da função.

Increase the efficiency.
Augmentation de l'efficacité.
Aumenta la eficacia.
Aumenta a eficiência.

Decrease the efficiency.
Diminution de la durée.
Diminue la eficacia.
Diminua a eficiência.

Obtaining the Expander Function



Función de expansión

Obtención de la función de expansión

4 Adjust the release time* and efficiency.
Régler la durée de disponibilité* et l'efficacité.
Ajuste el tiempo de liberación* y la eficacia.
Ajuste o tempo de desactivação da função* e eficiência.

3 EXPANDER

2 DYNAMIC SOUND CONTROL

1 EFFECT

Lengthen the release time.
Augmentation de la durée de disponibilité.
Alarga el tiempo de liberación.
Aumente o tempo de desactivação da função.

Shorten the release time.
Diminution de la durée de disponibilité.
Acorta el tiempo de liberación.
Encurte o tempo de desactivação da função.

Increase the efficiency.
Augmentation de l'efficacité.
Aumenta la eficacia.
Aumenta a eficiência.

Decrease the efficiency.
Diminution de la durée.
Diminue la eficacia.
Diminua a eficiência.

To disengage the digital dynamic sound
Press LINEAR.

If the EFFECT button is pressed (so that the indicator turns off), all of the digital surround processor effects will be disengaged.

Suppression du son dynamique numérique
Appuyer sur LINEAR.

Si l'on appuie sur la touche EFFECT (de manière à éteindre l'indicateur), tous les effets de traitement numérique du son d'ambiance sont libérés.

Desactivación del sonido dinámico digital
Presione LINEAR.

Si presiona la tecla EFFECT (de forma que se apague el indicador), se desactivarán todos los efectos del procesador de sonido perimétrico digital.

Desativação do compressor/expansor
Pressione LINEAR.

Se EFFECT for pressionada (fazendo com que a indicação se desligue), todos os efeitos do processador perimétrico digital serão desactivados.

Storing the Individually-Adjusted Sound – Personal File

By storing the individual digital surround processor effects in the memory, you can easily call up the settings at any desired time. You can store up to 10 combinations of the equalizer, surround, and dynamic sound functions, and also can give names to these individual settings by using 50 characters and a space.

Mémorisation du son réglé par l'utilisateur – Fichier personnel

En mémorisant les effets de traitement numérique d'ambiance choisis selon vos préférences, il vous est facile de rappeler ces réglages au moment voulu. Vous pouvez mémoriser jusqu'à 10 combinaisons à l'aide des fonctions d'égalisation, d'ambiance et de son dynamique. Vous pouvez aussi donner à ces combinaisons un nom en vous servant des 50 caractères et de l'espace.

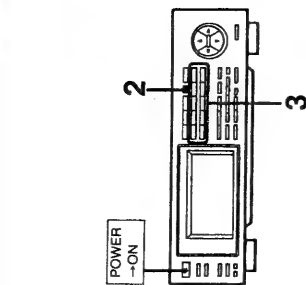
Almacenamiento de sonido individualmente ajustado – Archivo personal

Almacenando los efectos del procesador de sonido perimétrico digital en la memoria, podrá invocar fácilmente los ajustes en el momento deseado. Usted podrá almacenar hasta 10 combinaciones de funciones de equalización, de sonido perimétrico, y de sonido dinámico, y también podrá asignarles nombres empleando 50 caracteres y un espacio.

Armazenamento da combinação de ajustes – Personal File

Mediante o armazenamento de cada efeito digital na memória, pode-se facilmente obter os ajustes no momento desejado. Pode-se armazenar um máximo de 10 combinações de equalização, efeito perimétrico, e compressão/expansão. Designe a cada combinação, um memorando, dispondo-se de 50 caracteres e um espaço.

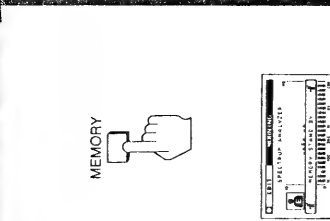
Storing the Desired Adjustments



1 Adjust the Digital Parametric Equalizer (see page 18), Digital Presence Surround (see page 22), and Digital Dynamic Sound (see page 26).

Régler l'égaliseur paramétrique numérique (voir page 18), le son numérique d'ambiance (voir page 22) et le son numérique dynamique (voir page 26). Ajuste el equalizador perimétrico digital (consulte la página 18), el sonido paramétrico de presencia digital (consulte la página 23), y el sonido dinámico digital (consulte la página 27).

Ajuste o equalizador paramétrico digital (página 18), o efeito perimétrico digital (página 23), e compressão/expansão (página 27).

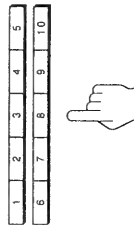


2

Mémorisation des réglages souhaités

3

Assign a number to the individual adjustments while "MEMORY STAND BY" is indicated. Donner un nom à ces réglages personnels lorsque "MEMORY STANDBY" est affiché. Assigne un numéro a los ajustes individuales mientras se esté indicando "MEMORY STAND BY". Designe um número para cada combinação de ajustes enquanto «MEMORY STAND BY» estiver indicada.



"P. FILE MEMORY" is indicated, and the adjustment is memorized in the selected number. "P. FILE MEMORY" est affiché et le réglage est mémorisé sous le numéro sélectionné. Aparecerá "P. FILE MEMORY", y el ajuste se memorizará en el número seleccionado. «P. FILE MEMORY» é indicado, e o ajuste é memorizado no número selecionado.

Calling up the Settings

Press PERSONAL FILE* and then the numeric button in which the desired adjustment has been stored.

* When using the remote commander, press SELECT (S10/M10/P.F.). Memorized settings to be called up change in the following sequence:

→ SELECT 10 (S10) → MORE 10 (M10) → PERSONAL FILE (P.F.) →

Rappel des réglages

Appuyer sur "PERSONAL FILE", puis sur la touche numérique où le réglage souhaité a été mémorisé.

* Si la télécommande est utilisée, appuyer sur SELECT (S10/M10/P.F.). Les réglages mémorisés à rappeler changent dans l'ordre suivant:

→ SELECT 10 (S10) → MORE 10 (M10) → PERSONAL FILE (P.F.) →

Invocación de ajustes

Presione PERSONAL FILE* y después la tecla numérica en la que haya almacenado el ajuste deseado.

* Cuando emplee el telemando, presione SELECT (S10/M10/P.F.). Los ajustes memorizados que podrán invocarse cambiarán en la secuencia siguiente:

→ SELECT 10 (S10) → MORE 10 (M10) → PERSONAL FILE (P.F.) →

Reobtenção dos ajustes

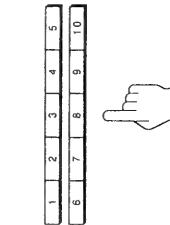
Pressione PERSONAL FILE* e então a tecla numérica correspondente ao ajuste armazenado.

* Ao utilizar o telecomando, pressione SELECT (S10/M10/P.F.). Os ajustes armazenados reobtidos alteram-se na seguinte ordem:

→ SELECT 10 (S10) → MORE 10 (M10) → PERSONAL FILE (P.F.) →

Armazenamento dos ajuste desejados

Assign a number to the individual adjustments while "MEMORY STAND BY" is indicated. Donner un nom à ces réglages personnels lorsque "MEMORY STANDBY" est affiché. Assigne un numéro a los ajustes individuales mientras se esté indicando "MEMORY STAND BY". Designe um número para cada combinação de ajustes enquanto «MEMORY STAND BY» estiver indicada.



"P. FILE MEMORY" is indicated, and the adjustment is memorized in the selected number. "P. FILE MEMORY" est affiché et le réglage est mémorisé sous le numéro sélectionné. Aparecerá "P. FILE MEMORY", y el ajuste se memorizará en el número seleccionado. «P. FILE MEMORY» é indicado, e o ajuste é memorizado no número selecionado.

Storing the Individually-
Adjusted Sound - Personal File

Mémorisation du son réglé
par l'utilisateur - Fichier personnel

Almacenamiento de sonido
individualmente ajustado - Archivo personal

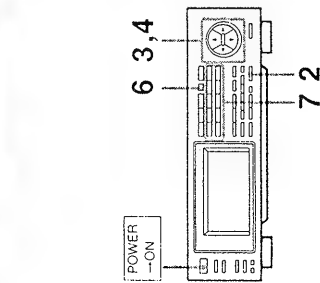
Armazenamento da combinação
de ajustes - Personal File

Giving Names to the Individual Adjustments
- Character Edit

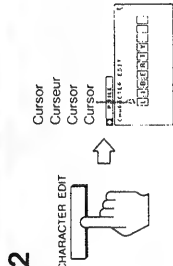
Dénomination des réglages personnels
- Montage de caractères

Asignación de nombres a los ajustes
individualmente ajustados - Archivo personal

Designação de memorandos para a combinação
de ajustes - Edição de memorandos



1 Adjust the sound, or call up the individual setting.
Régler le son ou rappeler le réglage personnel.
Ajuste el sonido, o invoque el ajuste individual.
Ajuste o som, ou obtenha a combinação de ajustes já armazenada.



The preset name will be indicated.
Le nom prééglé est affiché.
Se le indicará el nombre asignado.
Será indicado o memorando.

3 Select a character.
Choisir un caractère.
Seleccione un carácter.
Selecione um caractere.



4 Move the cursor.
Bouger le curseur.
Mueva el cursor.
Desloque o cursor.



5 Repeat steps 3 and 4.
Répéter les étapes 3 et 4.
Repita los pasos 3 y 4.
Repita os passos 3 e 4.



7 Assign a number to the individual adjustment while "MEMORY STAND BY" is indicated.
Designier un nombre au réglage personnel lorsque "MEMORY STAND BY" est affiché.
Asigne un número al ajuste individual mientras se esté indicando "MEMORY STAND BY".
Designie um número à combinação de ajustes enquanto «MEMORY STAND BY» estiver acesa.



The assigned personal file number and "P-FILE MEMORY" are indicated.
Le numéro de fichier personnel désigné et "P-FILE MEMORY" sont affichés.
Se indicarán el número asignado al archivo personal y "P-FILE MEMORY".
O número designado e «P-FILE MEMORY» acendem-se.

To change the name

Repeat the above procedure from the beginning.

Modification du nom

Répéter la procédure précédente à partir du début.

Para cambiar el nombre

Repita el procedimiento anterior desde el comienzo.

Para alterar o memorando

Repita os procedimentos acima indicados a partir do início.

Available Characters

() * + , - . / 0 1 2 3 4 5 6 7 8 9 : % < = > ? (space)
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Use ◀ of the CURSOR CONTROL buttons to call up a previous character.
Keep pressing ▲ or ▼ of the CURSOR CONTROL buttons to skip characters.

Caractères disponibles

() * + , - . / 0 1 2 3 4 5 6 7 8 9 : % < = > ? (espace)
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Utiliser ◀ des touches CURSOR CONTROL pour appeler le caractère précédent. Maintenir ▲ ou ▼ enfoncé sur les touches CURSOR CONTROL pour sauter des caractères.

Caractères disponibles

() * + , - . / 0 1 2 3 4 5 6 7 8 9 : % < = > ? (espacio)
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Emplee ◀ de las teclas CURSOR CONTROL para invocar un carácter anterior. Mantenga presionada ▲ o ▼ de las teclas CURSOR CONTROL para saltar caracteres.

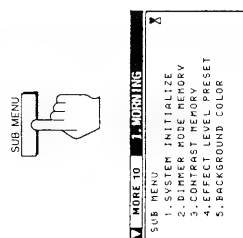
Caractères disponibles

() * + , - . / 0 1 2 3 4 5 6 7 8 9 : % < = > ? (espaco)
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Empree a tecla ◀ de CURSOR CONTROL para obter o caracter anterior. Mantenha ▲ ou ▼ de CURSOR CONTROL pressionada para saltar caracteres.

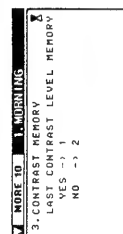
Using the Sub-Menu Window

The unit is equipped with 5 other essential functions which are listed in the sub-menu window.
Press SUB MENU and then a number for the desired function.



Affichage du menu secondaire

Cet appareil est équipé de 5 autres fonctions essentielles affichées sur le menu secondaire.
Appuyez sur la touche SUB MENU, puis sur un numéro de la fonction souhaitée.

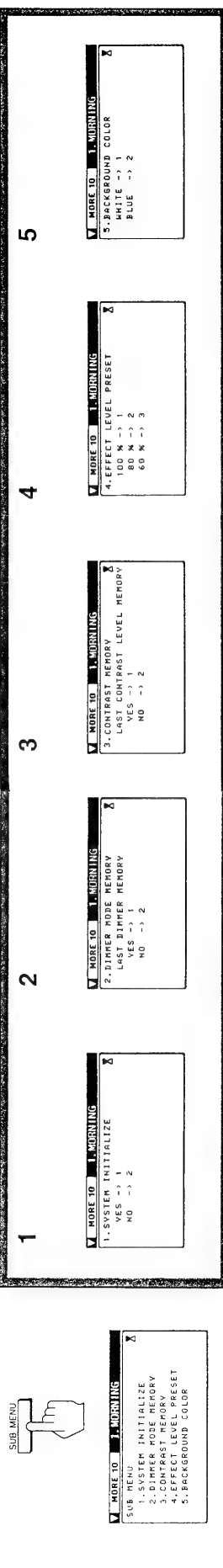


Emploio de la ventanilla del submenú

La unidad dispone de otras 5 funciones esenciales indicadas en la ventanilla del submenú.
Presione SUB MENU y después el número correspondiente a la función deseada.

Mostrador sub-menu

O aparelho vem equipado com 5 outras funções essenciais que estão listadas no sub-menu.
Pressione SUB MENU e então o número da função desejada.



- 1 SYSTEM INITIALIZE**
All of the digital surround processor effects can be initialized.
By pressing 1, the settings of following items will return to the initial factory settings.
 - Digital parametric equalizer (see page 18)
 - Digital presence surround (see page 22)
 - Digital dynamic surround (see page 26)
 - Effect level (see page 10)
 - Personal file (see page 28)
 - Dimmer (see page 12)
 - Contrast (see page 12)
 - Effect level preset (see below)
- 2 DIMMER MODE MEMORY**
The brightness of the display, individually set, can be memorized.
To memorize it, press 1.
If you press 2, the display becomes brighter every time the power is switched on.
- 3 CONTRAST MEMORY**
The contrast level of the display, individually set, can be memorized.
To memorize it, press 1.
If you press 2, the contrast level becomes 50% every time the power is switched on.
- 4 EFFECT LEVEL PRESET**
The effect level can be preset and memorized prior to calling up SELECT 10 or MORE 10 settings.
Three preset effect levels are provided. Press 1, 2, or 3 according to the desired level.
The effect level of the setting being used cannot be changed. To change it, recall the same setting or another one after pressing 1, 2, or 3.
- 5 BACKGROUND COLOR**
The background color of the display is selectable. There are two alternatives; white and blue.
Press 1 for white or 2 for blue.

- 1 Initialisation du système (SYSTEM INITIALIZE)**
Tous les effets de traitement numérique de l'ambiance peuvent être initialisés.
En appuyant sur 1, les réglages des paramètres suivants reviennent aux réglages initiaux effectués en usine.
 - Égalisation paramétrique numérique (voir page 18)
 - Environnement numérique (voir page 22)
 - Son dynamique numérique (voir page 26)
 - Niveau d'effet (voir page 10)
 - Fichier personnel (voir page 28)
 - Atténuateur (voir page 12)
 - Contraste (voir page 12)
 - Préréglage du niveau d'effet (voir ci-dessous)
- 2 Mémorisation du mode d'atténuation (DIMMER MODE MEMORY)**
La luminosité de l'écran réglée individuellement peut être mise en mémoire.
Pour cela, appuyer sur 1.
Si l'on appuie sur 2, l'affichage devient plus lumineux après la mise sous tension.
- 3 Mémorisation du contraste (CONTRAST MEMORY)**
Le niveau de contraste de l'affichage réglé personnellement peut être mémorisé.
Pour le mémoriser, appuyer sur 1.
Si l'on appuie sur 2, le niveau de contraste est à 50% à chaque mise sous tension.
- 4 Préréglage du niveau d'effet (EFFECT LEVEL PRESET)**
Le niveau d'effet peut être mis en mémoire avant de rappeler les pré-réglages SELECT 10 ou MORE 10.
Trois niveaux d'effets sont fournis. Appuyer sur 1, 2 ou 3 selon le niveau souhaité.
Le niveau d'effet du réglage utilisé ne peut être modifié. Pour cela, rappeler le même réglage ou tout autre en appuyant sur 1, 2 ou 3.
- 5 Couleurs de fond (BACKGROUND COLOR)**
Vous pouvez choisir entre deux couleurs de fond de l'écran: blanc ou bleu.
Appuyer sur 1 pour obtenir le blanc et 2 pour le bleu.

- 1 SYSTEM INITIALIZE**
Podrán inicializarse todos los efectos del procesador perimétrico digital. Al presionar 1, los ajustes de los ítemes siguientes volverán a los inicialmente realizados en fábrica.
 - Equalización paramétrica digital (consulte la página 19)
 - Sonido paramétrico de presencia digital (consulte la página 23)
 - Sonido dinámico digital (consulte la página 27)
 - Nivel del efecto (consulte la página 11)
 - Nivel del efecto (consulte la página 11)
 - Archivo personal (consulte la página 29)
 - Brillo (consulte la página 13)
 - Contraste (consulte la página 13)
 - Nivel de los ajustes memorizados (consulte más abajo)
- 2 DIMMER MODE MEMORY**
El brillo del visualizador, individualmente ajustado, podrá memorizarse. Para memorizarlo, presione 1.
Si presiona 2, el visualizador se volverá más brillante cada vez que conecte la alimentación.
- 3 CONTRAST MEMORY**
El nivel de contraste del visualizador, individualmente ajustado, podrá memorizarse.
Para memorizarlo, presione 1.
Si presiona 2, el nivel del contraste se volverá el 50% cada vez que conecte la alimentación.
- 4 EFFECT LEVEL PRESET**
El nivel del efecto podrá preajustar y memorizarse antes de invocar los ajustes de SELECT 10 y MORE 10.
Existen tres niveles de efecto preajustados. Presione 1, 2, o 3 de acuerdo con el nivel deseado.
El nivel del efecto de un ajuste que esté empleándose no podrá cambiarse. Para cambiarlo, invoque el mismo ajuste u otro después de presionar 1, 2, o 3.
- 5 BACKGROUND COLOR**
El color de fondo del visualizador es seleccionable. Existen dos alternativas: blanco y azul.
Presione 1 para blanco o 2 para azul.

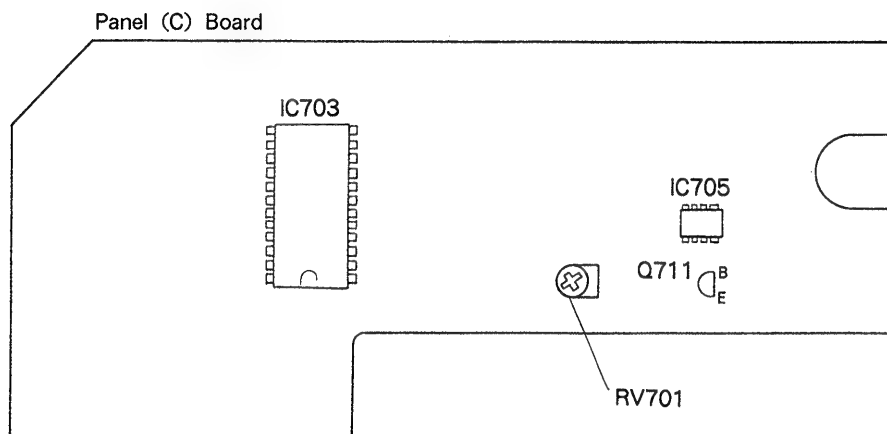
- 1 SYSTEM INITIALIZE**
Todos os efeitos do processador perimétrico digital são apagados.
Pressionando-se 1, os ajustes dos seguintes itens retornam aos níveis pré-programados na fábrica.
 - Equalizador paramétrico digital (página 19)
 - Efeito perimétrico digital (página 23)
 - Compressão/Expansão (página 27)
 - Nivel do efeito (página 11)
 - Personal File (página 29)
 - Iluminação (página 13)
 - Contraste (página 13)
 - Nivel do efeito pré-programado (veja abaixo)
- 2 DIMMER MODE MEMORY**
A iluminação do mostrador, ajustado por item, pode ser armazenada.
Para armazenar, pressione 1.
Se pressionar 2, a iluminação do mostrador torna-se mais intensa cada vez que se liga a alimentação.
- 3 CONTRAST MEMORY**
O nível de contraste do mostrador, ajustado por item, pode ser armazenado.
Para armazenar, pressione 1.
Se pressionar 2, o nível de contraste fica a 50% a cada vez que se liga a alimentação.
- 4 EFFECT LEVEL PRESET**
O nível do efeito pode ser pré-programado e armazenado antes de obter os ajustes SELECT 10 ou MORE 10.
3 níveis de efeitos estão programados. Pressione 1, 2, ou 3 de acordo com o nível desejado.
O nível do efeito do ajuste em uso não pode ser alterado. Para alterar, reobtenha o mesmo ajuste ou um outro depois do pressionamento de 1, 2, ou 3.
- 5 BACKGROUND COLOR**
É possível selecionar a cor de fundo do mostrador, entre branco e azul.
Pressione 1 para o branco ou 2 para o azul.

SECTION 2 ADJUSTMENT

【Electrical adjustment】

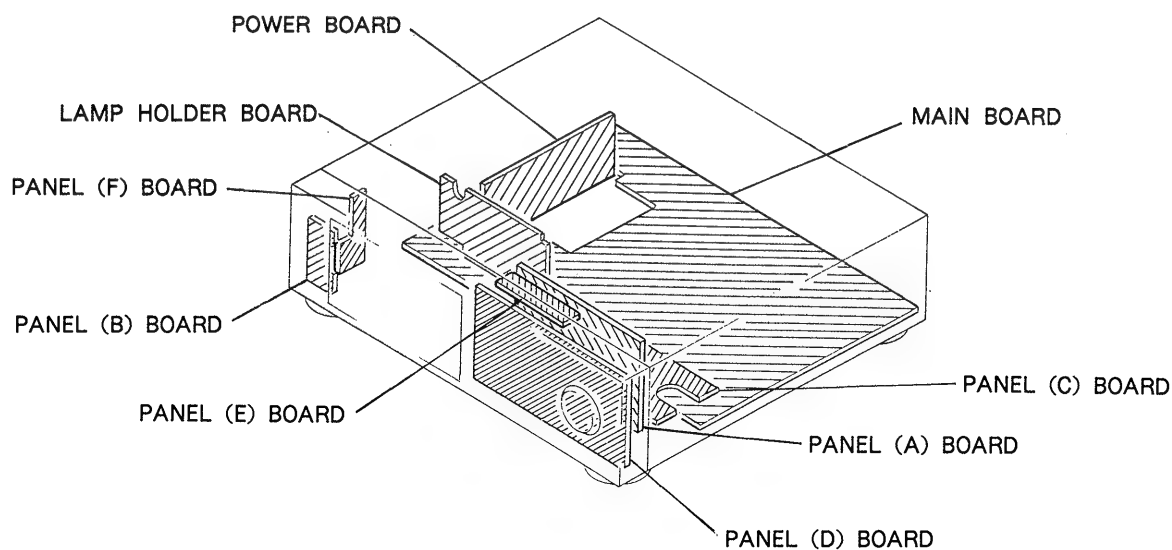
• Contrast adjustment

Adjust RV701 so that the voltage between the collector and the emitter of Q711 is set to 14.2 V in room temperature (approximately 25 °C) (Optimal condition when contrast is 50 %)



SECTION 3 DIAGRAMS

3-1. CIRCUIT BOARDS LOCATION



3-2. IC DESCRIPTION

IC701 Feature Control Microcomputer (HD6435328F6)

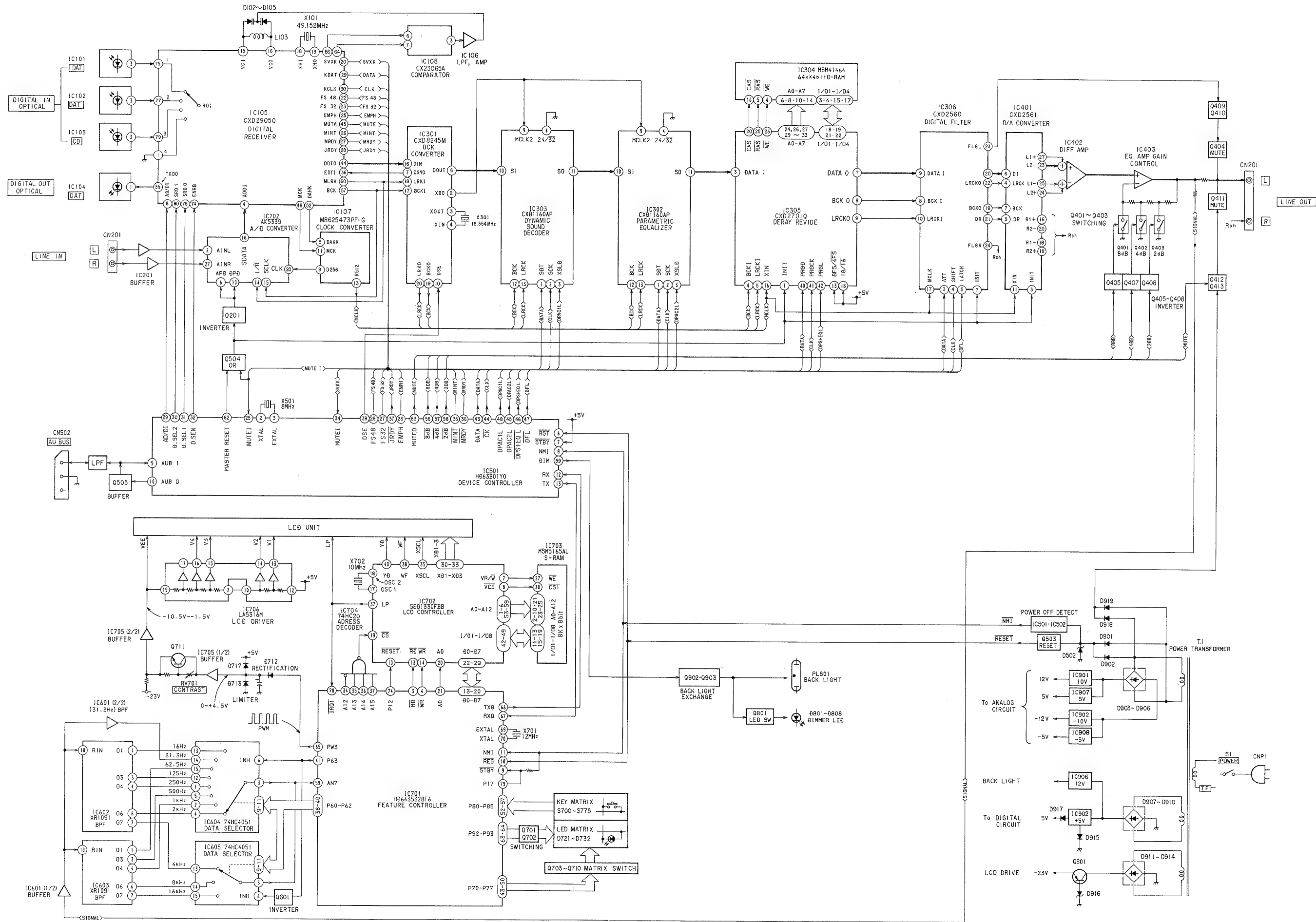
Displaying of LCD and LED is controlled in accordance with spectrum analyzer data input, key input, and audio bus input. Data of equipments' settings are transmitted to the device control microcomputer (IC501) in serial communication.

Pin No.	Pin Name	I/O	Description
1	R/W	—	} Not used.
2	\overline{DS}	—	
3	\overline{RD}	O	Data reading signal output to IC702 (LCD controller)
4	\overline{WR}	O	Data writing signal output to IC702 (LCD controller)
5	Vcc	—	Power supply terminal (+5 V)
6	MD0	I	Mode setting input (Fixed to "L".)
7	MD1	I	Mode setting input (Fixed to "H".)
8	MD2	I	Mode setting input (Fixed to "L".)
9	\overline{STBY}	I	Hardware standby mode input
10	\overline{RES}	I	Reset input
11	\overline{NMI}	I	Power interrupt detection input. When it is set to "L", P17 (pin 79) is set to after the backup processing.
12	Vss	—	GND
13~20	D0~D7	I/O	Data bus to IC702 (LCD contrller)
21	A0	O	IC702 (LCD controller) internal register select output
22~28	A1~A7	O	Address output. Not used.
29	Vss	—	GND
30~33	A8~A11	O	Address output. Not used.
34~37	A12~A15	O	Address output to generate IC702 (LCD controller) \overline{CS} signal
38~41	P60~P63	O	BPF select for spectrum analyzer to IC604 and IC605 (multiplexer)
42	Vcc	—	Power supply terminal (+5 V)
43~50	P70~P77	O	Key and LED matrix output
51	AVss	—	Analog GND
52~58	P80~P86	I	Key matrix input
59	AN7	I	Spectrum analyzer data input (analog)
60	AVcc	—	Analog system power supply terminal (+5 V)
61	P90	—	Not used.
62	P91	—	Not used.
63,64	P92,P93	O	LED matrix output
65	PW3	O	LCD contrast adjustment PWM output (Darker contrast when closer to 100%)
66	TXD	O	Serial communication output to IC501 (device control microcomputer)
67	RXD	I	Serial communication input to IC501 (device control microcomputer)
68	P97	—	Not used.
69	EXTAL	I	Clock input (12 MHz)
70	XTAL	O	Clock output
71	Vss	—	GND
72	CK	—	Not used.
73	E	—	Not used.
74	P12	O	Reset output to IC702 (LCD controller)
75~77	P13~P15	—	Not used.
78	$\overline{IRQ1}$	I	LCD X driver latch pulse input
79	P17	O	Output (\overline{STBY} (pin 9) is set to "L") to physically set the backup mode when the power is set to OFF.
80	$\overline{A5}$	—	Not used.

IC702 LCD controller (SED1330FBB)

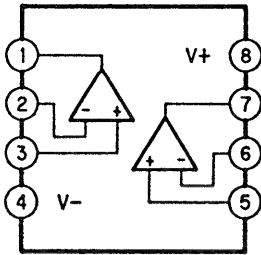
Character data transmitted from the panel microcomputer (IC701) are stored in the display memory (IC703), read out periodically, converted to LCD signal, and output.

Pin No.	Pin Name	I/O	Description
1~6	VA5~VA0	O	Address output to IC703 (display memory)
7	VR/ \overline{W}	O	Read/write signal output to IC703 (display memory)
8	\overline{VCE}	O	Chip select output to IC703 (display memory)
9	\overline{REF} NC	O	Test output. Not used.
10	\overline{RES}	I	System reset input
11	SYNC NC	O	Test output. Not used.
12	CLO NC	O	
13	\overline{RD}	I	Data read signal input from IC701 (panel microcomputer)
14	\overline{WR}	I	Data write signal input from IC701 (panel microcomputer)
15	SEL2	I	Interface bus select (Set always to GND.)
16	SEL1	I	Interface bus select (Set always to GND.)
17	XG	I	Clock input (10 MHz)
18	XD	O	Clock output
19	\overline{CS}	I	Chip select input from the address decoder (IC704)
20	A0	I	Internal register select input
21	V _{DD}	—	Power supply terminal (+5 V)
22~29	D0~D7	I/O	Data bus to IC701 (panel microcomputer)
30~33	XD3~XD0	O	Data output to LCD X driver
34	XECL	O	Enable chain clock output to LCD X driver. Not used.
35	XSCL	O	Data shift clock output to LCD X driver
36	V _{SS}	—	GND
37	LP	O	LCD X driver latch pulse output
38	WF	O	Frame signal output
39	YDIS	O	LCD display OFF output. Not used.
40	YD	O	Data output to LCD Y driver
41	YSCL	O	Data shift clock output to LCD Y driver. Not used.
42~49	VD7~VD0	I/O	Data bus to IC703 (display memory)
50~59	VA15~VA6	O	Address output (VA13 to VA15 are not used) to IC703 (display memory).
60	NC	—	

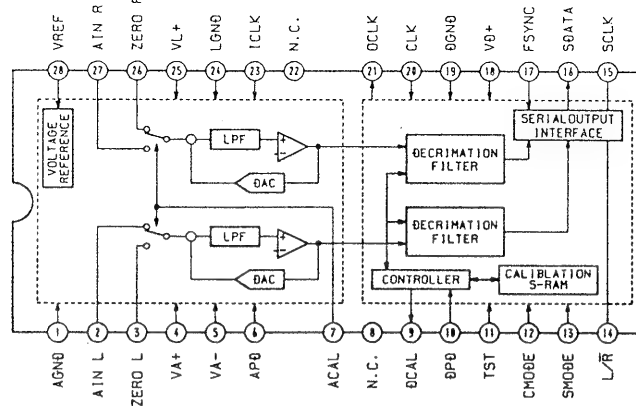


3-4. IC BROCK DIAGRAMS

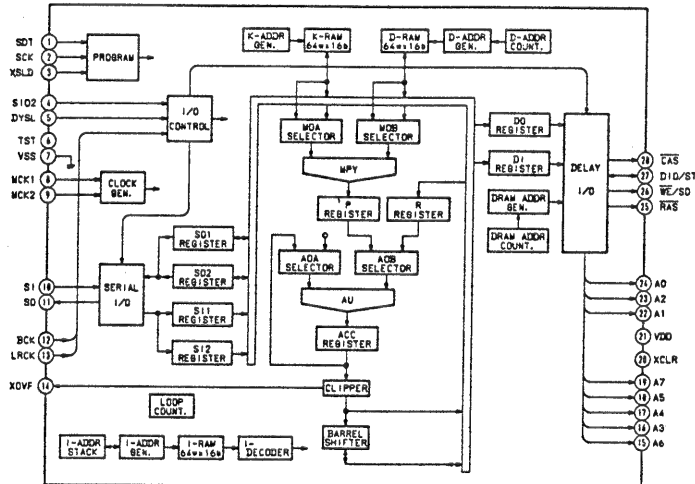
• IC201, 404, 705 M5218AP



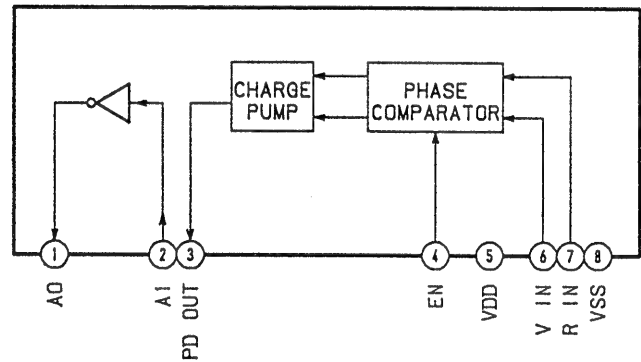
• IC202 AK53389



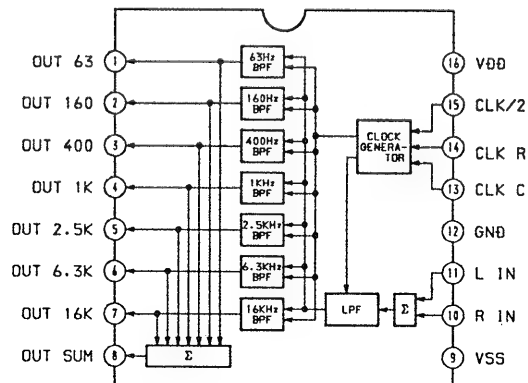
• IC302,303 CXD1160AP



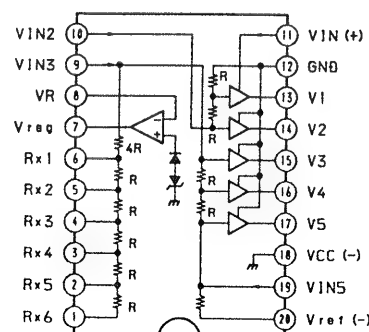
• IC108 CX23065A



• IC602,603 XR1091



• IC706 LM5316M

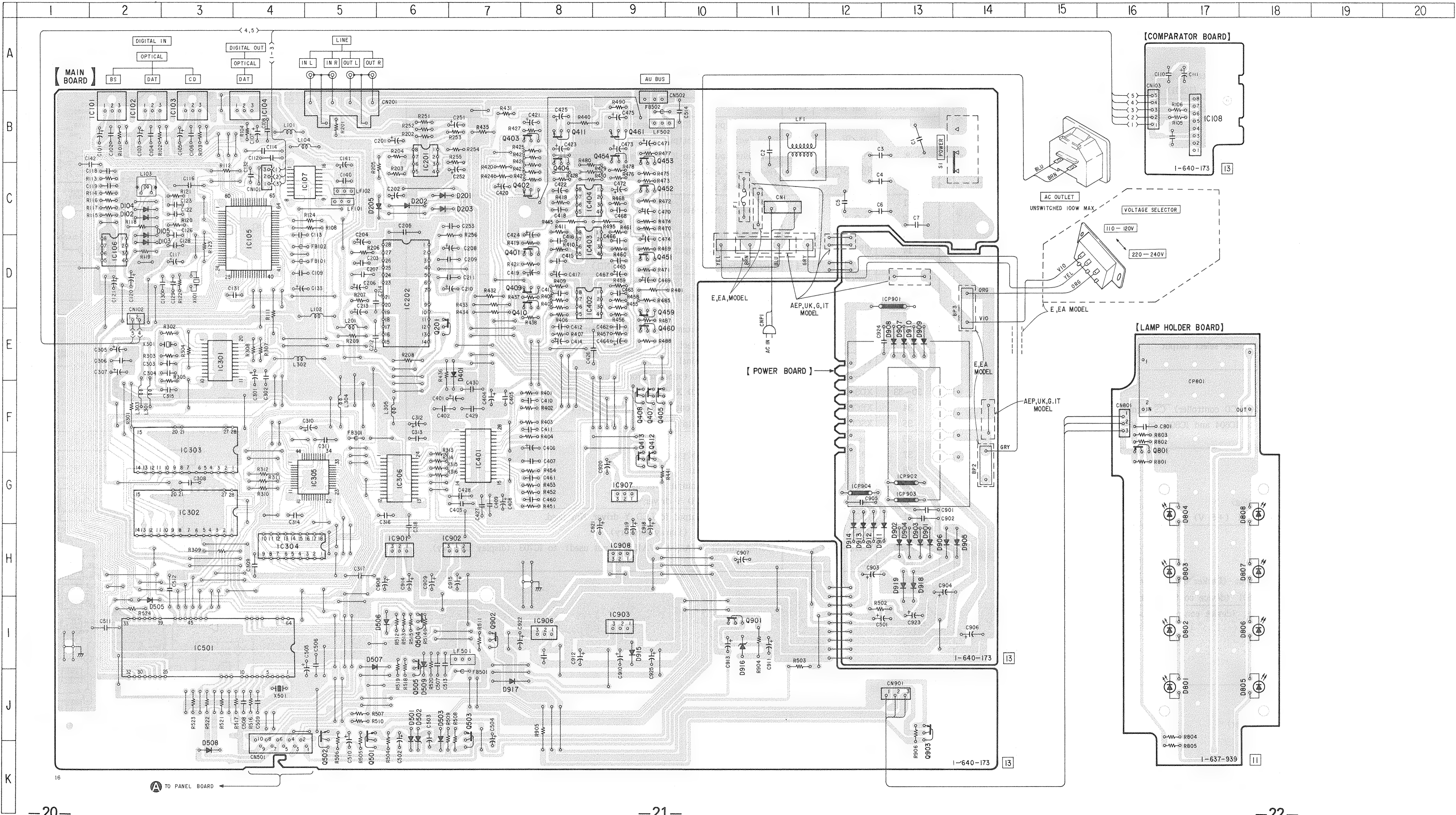


3-5. PRINTED WIRING BOARDS - MAIN SECTION - • See page 27 for Semiconductor Lead Layouts.

• Semiconductor Location			
Ref. No.	Location	Ref. No.	Location
D102	C-2	IC908	H-9
D103	D-2	Q201	E-6
D104	C-2	Q401	D-8
D105	D-2	Q402	C-8
D201	C-6	Q403	B-8
D202	C-6	Q404	C-8
D203	C-6	Q405	F-9
D205	C-6	Q407	F-9
D401	E-7	Q408	D-8
D501	J-6	Q409	D-8
D502	J-6	Q410	D-8
D503	J-6	Q411	B-8
D505	I-2	Q412	G-9
D506	I-2	Q413	G-9
D507	I-5	Q451	D-9
D508	K-3	Q452	C-9
D509	J-6	Q453	B-9
D801	J-17	Q454	B-9
D802	I-17	Q459	E-9
D803	H-17	Q460	E-9
D804	G-17	Q461	B-9
D805	J-18	Q501	K-5
D806	I-18	Q502	K-5
D807	H-18	Q503	J-7
D808	G-18	Q504	I-6
D901	H-13	Q505	J-6
D902	H-13	Q801	F-16
D903	H-13	Q901	I-11
D904	H-13	Q902	I-7
D905	H-14	Q903	J-13
D906	H-13		
D907	E-13		
D908	E-13		
D909	E-13		
D910	E-13		
D911	H-13		
D912	H-12		
D913	H-12		
D914	H-12		
D915	I-9		
D916	I-11		
D917	J-7		
D918	H-13		
D919	H-13		
IC101	B-2		
IC102	B-2		
IC103	B-3		
IC104	B-4		
IC105	D-4		
IC106	D-2		
IC107	C-4		
IC108	B-17		
IC201	B-6		
IC202	D-6		
IC301	F-3		
IC302	G-3		
IC303	F-3		
IC304	H-4		
IC305	G-5		
IC306	G-5		
IC401	G-7		
IC402	D-8		
IC403	D-8		
IC404	C-8		
IC501	I-3		
IC901	H-6		
IC902	H-7		
IC903	I-9		
IC906	I-8		
IC907	G-9		

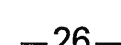
Note on Mounting Diagram:
• : parts extracted from the component side.
• : component side.

G : Germany
IT : Italian
EA : Saudi Arabia





-25-

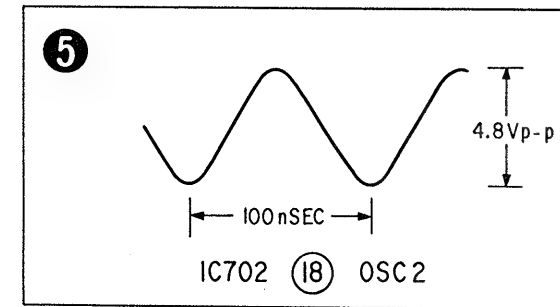


4

83 nSEC

4.8 Vp-p

IC701 (70) XTAL



MSF7812L
TA7805S
TA7905S

GP1F32R
GP1F32T

CXD2561M

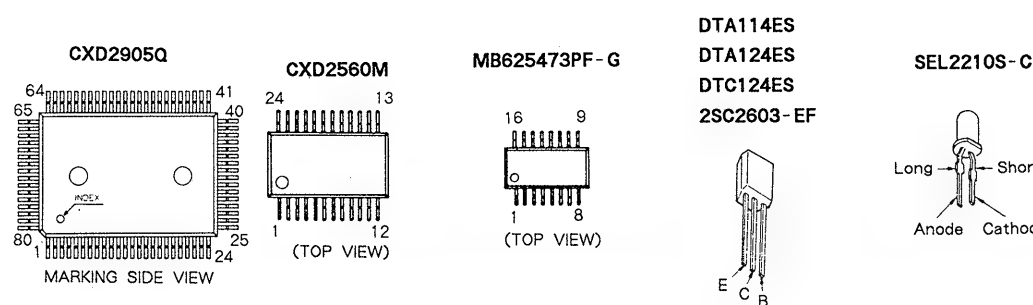
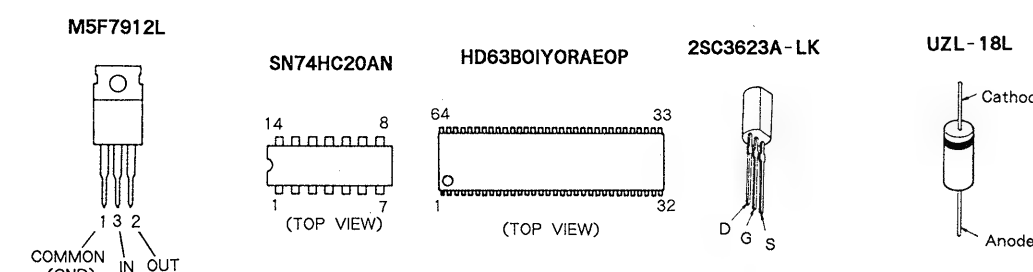
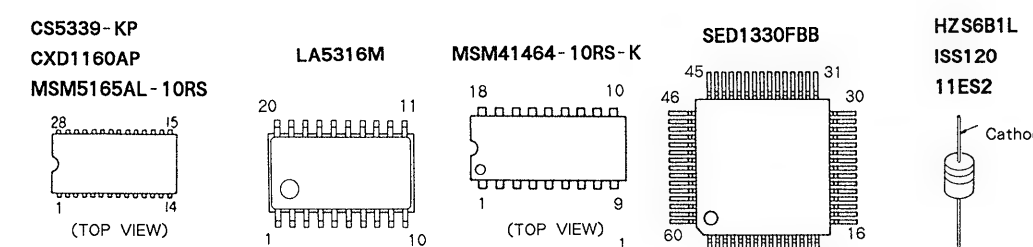
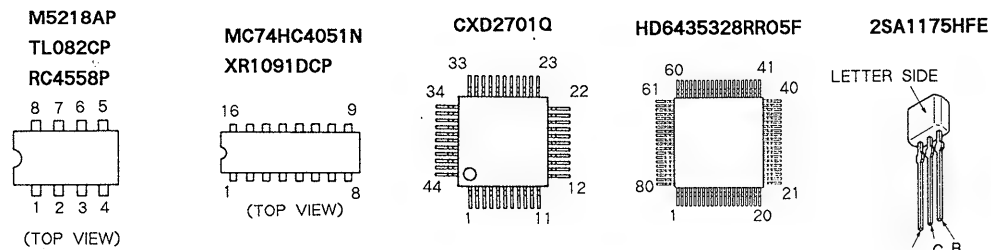
CXD8245M

2SB1116-K

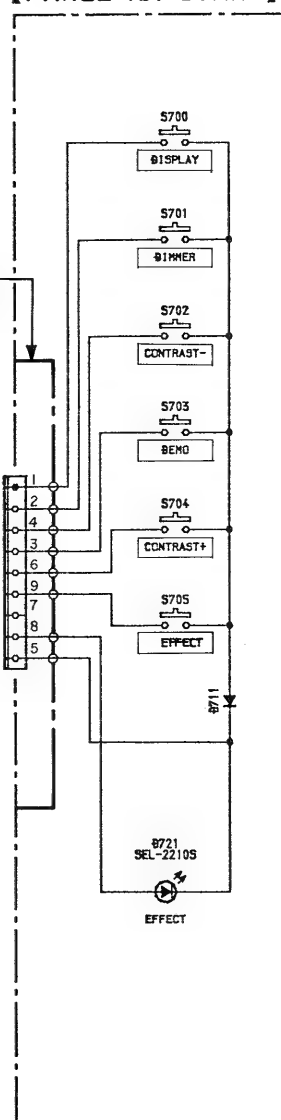
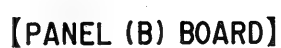
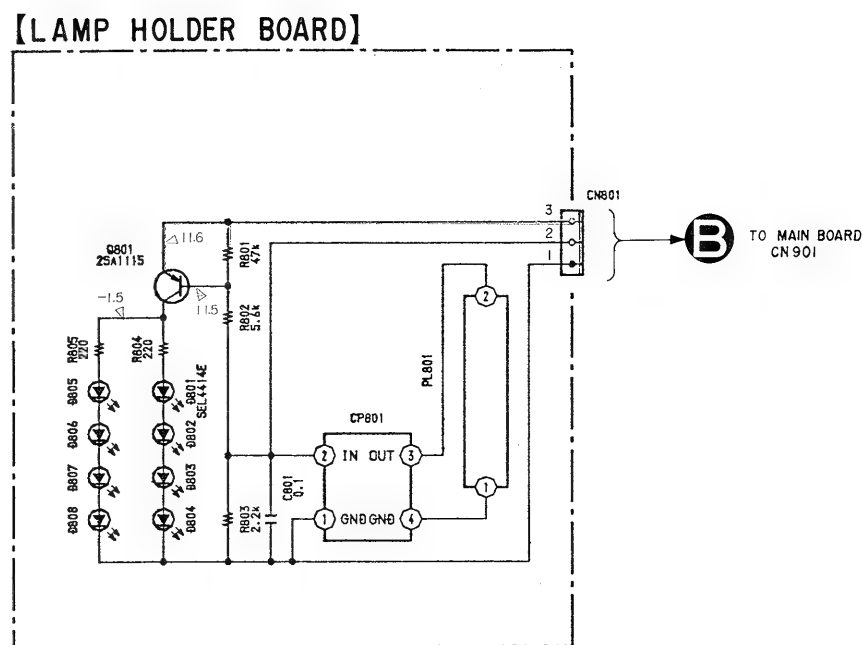
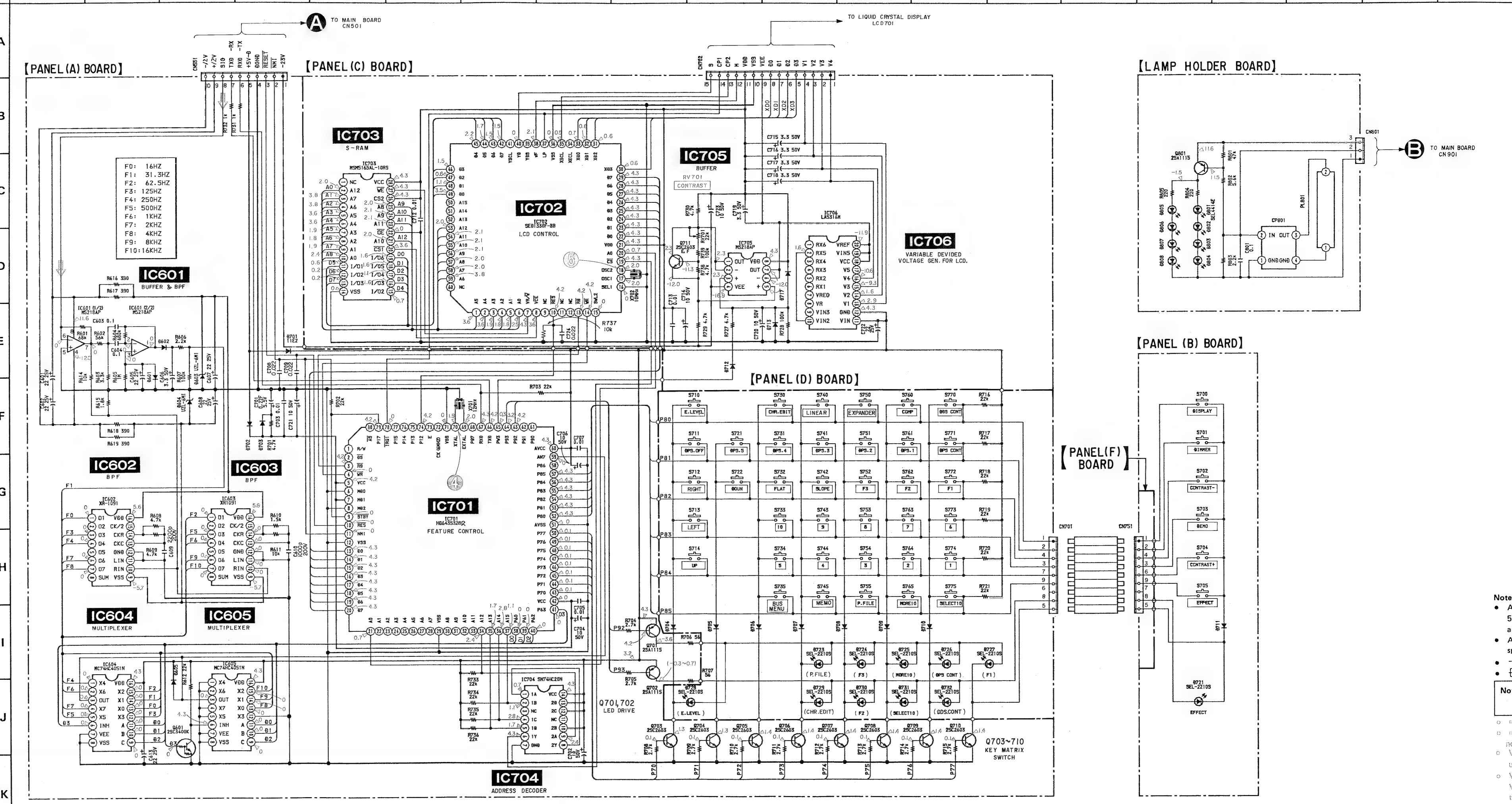
SEL4414E-C

The diagram shows pinout information for several electronic components:

- MSF7812L, TA7805S, TA7905S:** A three-pin component with pins labeled IN, GND, and OUT.
- GP1F32R, GP1F32T:** A four-pin component with pins numbered 1 through 4. Pin 1 is Vout, Pin 2 is GND, Pin 3 is Vcc, and Pin 4 is GND.
- CXD2561M:** An 18-pin DIP package shown from the top view. Pins are numbered 1 through 18 around the perimeter.
- CXD8245M:** An 18-pin DIP package shown from the top view. Pins are numbered 1 through 18 around the perimeter.
- 2SB1116-K:** A three-pin TO-18 package with pins labeled E, B, and C.
- SEL4414E-C:** A two-pin component with pins labeled Long Anode and Short Cathode.





1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----





G : Germany
IT : Italian
EA: Saudi Arabia

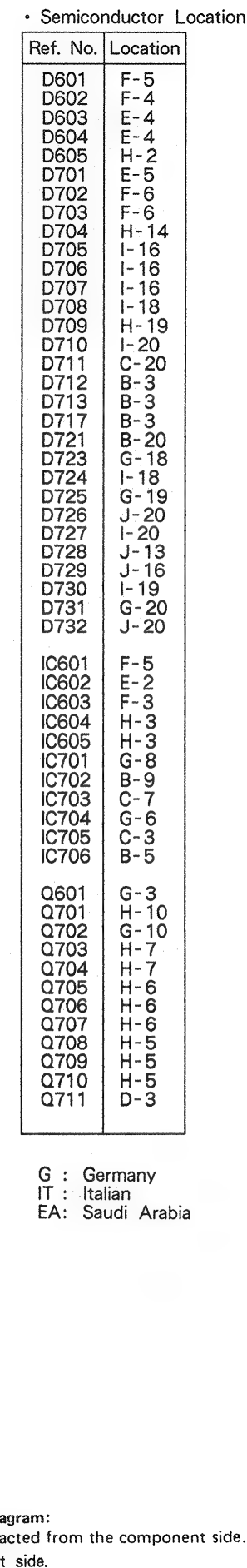
Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. $\text{pF} : \mu\text{F}$ 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
-  : nonflammable resistor.
-  : fusible resistor.

Note: The components identified by mark **A** or dotted line with mark **A** are critical for safety.
 Replace only with part number specified.

- o  : Ω : Line
- o  : K : Line
- o no mark : No-signal, PHONO MODE
- o Voltage and waveforms are dc with respect to ground unless o-signal conditions.
- o Voltages are taken with a VOM (input impedance 10M Ω)
- o Voltage variations may be noted due to normal production tolerances.
- o Circled numbers refer to waveforms.
- o Signal path.

\Rightarrow : CD



SECTION 4 EXPLODED VIEWS

NOTE :

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
Example :
KNOB, BALANCE (WHITE)...(RED)

↑
Parts color

↑
Cabinet's color

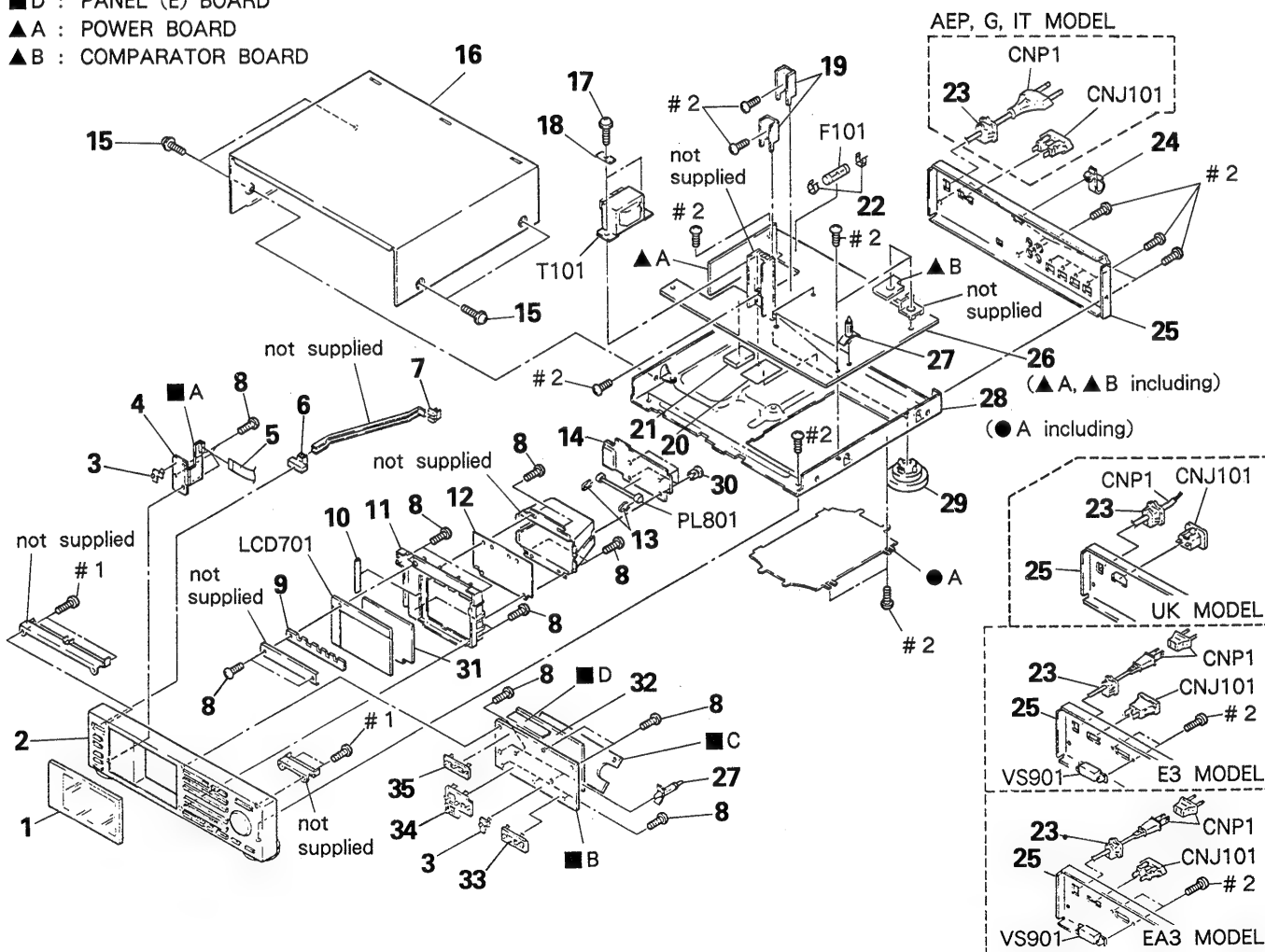
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

G : Germany
IT : Italian
EA : Saudi Arabia

OVERALL SECTION

- A : PANEL (F) BOARD
- B : PANEL (D) BOARD
- C : PANEL (C) BOARD
- D : PANEL (E) BOARD
- ▲ A : POWER BOARD
- ▲ B : COMPARATOR BOARD



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
1	4-941-523-11	WINDOW		26	* A-4345-233-A	MAIN BOARD, COMPLETE (AEP, Italian)	
2	X-4941-442-1	PANEL ASSY, FRONT			* A-4345-234-A	MAIN BOARD, COMPLETE (Germany)	
3	* 4-941-534-01	HOLDER (1), LED			* A-4345-235-A	MAIN BOARD, COMPLETE (UK)	
4	* 1-637-045-11	PANEL B BOARD			* A-4345-236-A	MAIN BOARD, COMPLETE (E, Saudi Arabia)	
5	1-575-216-11	WIRE, FLAT TYPE (9 CORE)		27	* 4-924-098-91	HOLDER, PC BOARD	
6	4-921-919-01	BUTTON (P)		28	* 4-924-520-31	CHASSIS	
7	4-866-342-00	JOINT (B), KNOB		29	4-934-884-01	FOOT	
8	4-928-635-01	SCREW, +BV (2.6X8) TAPPING		30	4-812-134-00	RIVET NYLON, 3.5	
9	* 4-941-531-01	CUSHION		31	* 4-941-543-01	ILLUMINATOR (4)	
10	* 4-941-530-01	CUSHION		32	* A-4345-232-A	PANEL (A) BOARD, COMPLETE	
11	* 4-941-527-01	HOLDER (LCD)		33	* 4-941-536-01	HOLDER (3), LED	
12	* 4-942-169-01	PLATE, SHIELD		34	* 4-941-535-01	HOLDER (2-1), LED	
13	* 4-942-783-01	HOLDER		35	* 4-941-541-01	HOLDER (2-2), LED	
14	* 1-637-939-11	LAMP HOLDER BOARD		CNJ101	△1-526-751-00	OUTLET, AC (UK)	
15	3-704-366-01	SCREW (CASE) (M3X8)			△1-526-794-11	OUTLET, AC (AEP, Germany, Italian, Saudi Arabia)	
16	4-919-377-01	CASE			△1-526-882-00	OUTLET, AC (E)	
17	4-946-541-01	SCREW (4X8), +PWHTT		CNP1	△1-575-651-11	CORD, POWER (AEP, Germany, Italian)	
18	4-946-540-01	WASHER (SQUARE)			△1-575-654-11	CORD, POWER (Saudi Arabia)	
19	* 3-309-144-21	HEAT SINK			△1-575-656-11	CORD, POWER (E)	
20	* 4-945-761-01	SHEET (INSULATING)			△1-575-669-21	CORD, POWER (UK)	
21	9-911-841-XX	CUSHION		F101	△1-532-259-00	FUSE, TIME-LAG (AEP, UK, Germany, Italian)	(1.6A)
22	* 1-533-213-31	HOLDER, FUSE					
23	* 3-703-244-00	BUSHING (2104), CORD (AEP, UK, Germany, Italian, Saudi Arabia)		LCD701	1-809-202-11	DISPLAY PANEL, LIQUID CRYSTAL	
	* 3-703-571-11	BUSHING (S) (4516), CORD (E)		PL801	1-519-653-11	GAS DISCHARGE TUBE, FLUORESCENT	
24	* 2-379-614-01	HOOK		VS901	△1-570-046-21	SWITCH, VOLTAGE CHANGE (E, Saudi Arabia)	
25	* 4-943-823-11	PANEL, BACK (AEP, Germany, Italian)		T101	△1-450-596-11	TRANSFORMER, POWER (AEP, Germany, Italian)	
	* 4-943-823-21	PANEL, BACK (UK)			△1-450-597-11	TRANSFORMER, POWER (UK)	
	* 4-943-823-31	PANEL, BACK (E)			△1-450-598-11	TRANSFORMER, POWER (E, Saudi Arabia)	
	* 4-943-823-51	PANEL, BACK (Saudi Arabia)					

MAIN

SECTION 5 ELECTRICAL PARTS LIST

NOTE :

The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- - XX, - X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA..., μ PA...,
uPB..., μ PB..., uPC..., μ PC...,
uPD..., μ PD...
- CAPACITORS:
uF: μ F
- COILS
uH: μ H

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
* A-4345-234-A	MAIN BOARD, COMPLETE (Germany)			C120	1-126-049-11	ELECT 22uF 20% 25V	
	*****			C121	1-126-049-11	ELECT 22uF 20% 25V	
* A-4345-233-A	MAIN BOARD, COMPLETE (AEP, Italian)			C122	1-106-343-00	MYLAR 1000PF 5% 200V	
	*****			C123	1-106-343-00	MYLAR 1000PF 5% 200V	
* A-4345-235-A	MAIN BOARD, COMPLETE (UK)			C126	1-164-070-11	CERAMIC 100PF 5% 50V	



* A-4345-236-A	MAIN BOARD, COMPLETE (E, Saudi Arabia)			C128	1-136-153-00	FILM 0.01uF 5% 50V	
	*****			C129	1-164-014-11	CERAMIC 5PF 0.25PF 50V	
* 1-533-213-31	HOLDER, FUSE (AEP, UK, Germany, Italian)			C130	1-164-014-11	CERAMIC 5PF 0.25PF 50V	
* 3-309-144-21	HEAT SINK			C131	1-136-153-00	FILM 0.01uF 5% 50V	
7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S			C132	1-136-153-00	FILM 0.01uF 5% 50V	
< CAPACITOR >				C133	1-124-587-11	ELECT 220uF 20% 6.3V	
C1	Δ 1-161-744-00	CERAMIC 0.01uF 400V		C140	1-136-165-00	FILM 0.1uF 5% 50V	
C2	Δ 1-161-744-00	CERAMIC 0.01uF 400V		C141	1-126-049-11	ELECT 22uF 20% 25V	
C3	Δ 1-161-741-00	CERAMIC 0.001uF 10% 400V		C142	1-164-159-11	CERAMIC 0.1uF 50V	
C4	Δ 1-161-741-00	CERAMIC 0.001uF 10% 400V		C143	1-136-165-00	FILM 0.1uF 5% 50V	
C5	Δ 1-161-741-00	CERAMIC 0.001uF 10% 400V		C201	1-126-049-11	ELECT 22uF 20% 25V	
C6	Δ 1-161-741-00	CERAMIC 0.001uF 10% 400V		C202	1-126-049-11	ELECT 22uF 20% 25V	
C7	Δ 1-161-741-00	CERAMIC 0.001uF 10% 400V		C203	1-136-153-00	FILM 0.01uF 5% 50V	
C101	1-126-049-11	ELECT 22uF 20% 25V		C204	1-126-059-11	ELECT 10uF 20% 50V	
C102	1-164-159-11	CERAMIC 0.1uF 50V		C205	1-164-159-11	CERAMIC 0.1uF 50V	
C103	1-126-049-11	ELECT 22uF 20% 25V		C206	1-126-049-11	ELECT 22uF 20% 25V	
C104	1-164-159-11	CERAMIC 0.1uF 50V		C207	1-164-159-11	CERAMIC 0.1uF 50V	
C105	1-126-049-11	ELECT 22uF 20% 25V		C208	1-126-049-11	ELECT 22uF 20% 25V	
C106	1-164-159-11	CERAMIC 0.1uF 50V		C209	1-164-159-11	CERAMIC 0.1uF 50V	
C107	1-126-049-11	ELECT 22uF 20% 25V		C210	1-126-049-11	ELECT 22uF 20% 25V	
C108	1-164-159-11	CERAMIC 0.1uF 50V		C211	1-164-159-11	CERAMIC 0.1uF 50V	
C109	1-136-153-00	FILM 0.01uF 5% 50V		C212	1-164-159-11	CERAMIC 0.1uF 50V	
C110	1-136-165-00	FILM 0.1uF 5% 50V		C213	1-126-049-11	ELECT 22uF 20% 25V	
C111	1-124-443-00	ELECT 100uF 20% 10V		C214	1-164-159-11	CERAMIC 0.1uF 50V	
C112	1-164-159-11	CERAMIC 0.1uF 50V		C251	1-126-049-11	ELECT 22uF 20% 25V	
C113	1-136-153-00	FILM 0.01uF 5% 50V		C252	1-126-049-11	ELECT 22uF 20% 25V	
C114	1-164-159-11	CERAMIC 0.1uF 50V		C253	1-136-153-00	FILM 0.01uF 5% 50V	
C116	1-161-494-00	CERAMIC 0.022uF 25V		C301	1-126-049-11	ELECT 22uF 20% 25V	
C117	1-124-443-00	ELECT 100uF 20% 10V		C302	1-136-153-00	FILM 0.01uF 5% 50V	
C118	1-164-079-11	CERAMIC 330PF 10% 50V		C303	1-102-960-00	CERAMIC 24PF 5% 50V	
C119	1-136-165-00	FILM 0.1uF 5% 50V					

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C304	1-102-960-00	CERAMIC 24PF 5% 50V		C460	1-164-077-11	CERAMIC 220PF 10% 50V	
C305	1-124-443-00	ELECT 100uF 20% 10V		C461	1-164-077-11	CERAMIC 220PF 10% 50V	
C306	1-164-159-11	CERAMIC 0.1uF 50V		C462	1-164-076-11	CERAMIC 180PF 10% 50V	
C307	1-124-443-00	ELECT 100uF 20% 10V		C463	1-164-076-11	CERAMIC 180PF 10% 50V	
C308	1-164-159-11	CERAMIC 0.1uF 50V		C464	1-126-049-11	ELECT 22uF 20% 25V	
C309	1-164-159-11	CERAMIC 0.1uF 50V		C465	1-130-472-00	MYLAR 0.0012uF 5% 50V	
C310	1-124-443-00	ELECT 100uF 20% 10V		C466	1-106-359-00	MYLAR 4700PF 5% 200V	
C311	1-164-159-11	CERAMIC 0.1uF 50V		C467	1-126-049-11	ELECT 22uF 20% 25V	
C312	1-124-587-11	ELECT 220uF 20% 6.3V		C468	1-164-066-11	CERAMIC 68PF 5% 50V	
C313	1-136-153-00	FILM 0.01uF 5% 50V		C469	1-124-463-00	ELECT 0.1uF 20% 50V	
C314	1-136-165-00	FILM 0.1uF 5% 50V		C470	1-124-463-00	ELECT 0.1uF 20% 50V	
C315	1-164-027-11	CERAMIC 22PF 5% 50V		C471	1-124-463-00	ELECT 0.1uF 20% 50V	
C316	1-161-494-00	CERAMIC 0.022uF 25V		C472	1-126-049-11	ELECT 22uF 20% 25V	
C317	1-164-159-11	CERAMIC 0.1uF 50V		C473	1-126-163-11	ELECT 4.7uF 20% 50V	
C318	1-164-159-11	CERAMIC 0.1uF 50V		C474	1-126-022-11	ELECT 47uF 20% 10V	
C401	1-126-022-11	ELECT 47uF 20% 10V		C475	1-126-301-11	ELECT 1uF 20% 50V	
C402	1-164-159-11	CERAMIC 0.1uF 50V		C501	1-126-059-11	ELECT 10uF 20% 50V	
C403	1-164-159-11	CERAMIC 0.1uF 50V		C502	1-126-157-11	ELECT 10uF 20% 16V	
C404	1-126-022-11	ELECT 47uF 20% 10V		C503	1-126-301-11	ELECT 1uF 20% 50V	
C405	1-136-165-00	FILM 0.1uF 5% 50V		C504	1-126-301-11	ELECT 1uF 20% 50V	
C406	1-126-022-11	ELECT 47uF 20% 10V		C505	1-126-177-11	ELECT 100uF 20% 10V	
C407	1-136-165-00	FILM 0.1uF 5% 50V		C506	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C408	1-126-022-11	ELECT 47uF 20% 10V		C507	1-161-494-00	CERAMIC 0.022uF 25V	
C409	1-164-159-11	CERAMIC 0.1uF 50V		C508	1-161-494-00	CERAMIC 0.022uF 25V	
C410	1-164-077-11	CERAMIC 220PF 10% 50V		C509	1-161-494-00	CERAMIC 0.022uF 25V	
C411	1-164-077-11	CERAMIC 220PF 10% 50V		C510	1-126-301-11	ELECT 1uF 20% 50V	
C412	1-164-076-11	CERAMIC 180PF 10% 50V		C511	1-164-159-11	CERAMIC 0.1uF 50V	
C413	1-164-076-11	CERAMIC 180PF 10% 50V		C512	1-164-159-11	CERAMIC 0.1uF 50V	
C414	1-126-049-11	ELECT 22uF 20% 25V		C513	1-164-159-11	CERAMIC 0.1uF 50V	
C415	1-130-472-00	MYLAR 0.0012uF 5% 50V		C514	1-164-159-11	CERAMIC 0.1uF 50V	
C416	1-106-359-00	MYLAR 4700PF 5% 200V		C901	1-161-377-00	CERAMIC 0.0047uF 20% 50V	
C417	1-126-049-11	ELECT 22uF 20% 25V		C902	1-161-377-00	CERAMIC 0.0047uF 20% 50V	
C418	1-164-066-11	CERAMIC 68PF 5% 50V		C903	1-126-029-11	ELECT 3300uF 20% 25V	
C419	1-124-463-00	ELECT 0.1uF 20% 50V		C904	1-126-029-11	ELECT 3300uF 20% 25V	
C420	1-124-463-00	ELECT 0.1uF 20% 50V		C905	1-161-377-00	CERAMIC 0.0047uF 20% 50V	
C421	1-124-463-00	ELECT 0.1uF 20% 50V		C906	1-126-029-11	ELECT 3300uF 20% 25V	
C422	1-126-049-11	ELECT 22uF 20% 25V		C907	1-124-478-11	ELECT 100uF 20% 25V	
C423	1-126-163-11	ELECT 4.7uF 20% 50V		C908	1-126-025-11	ELECT 330uF 20% 16V	
C424	1-126-022-11	ELECT 47uF 20% 10V		C909	1-126-025-11	ELECT 330uF 20% 16V	
C425	1-126-301-11	ELECT 1uF 20% 50V		C910	1-124-587-11	ELECT 220uF 20% 6.3V	
C426	1-164-159-11	CERAMIC 0.1uF 50V		C911	1-124-910-11	ELECT 47uF 20% 50V	
C427	1-164-159-11	CERAMIC 0.1uF 50V		C912	1-124-472-11	ELECT 470uF 20% 10V	
C428	1-164-159-11	CERAMIC 0.1uF 50V		C913	1-124-482-11	ELECT 33uF 20% 35V	
C429	1-164-159-11	CERAMIC 0.1uF 50V				(E, Saudi Arabia)	
C430	1-164-159-11	CERAMIC 0.1uF 50V		C913	1-124-242-00	ELECT 33uF 20% 25V	
						(AEP, UK, Germany, Italian)	

MAIN

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C914	1-126-059-11	ELECT 10uF 20% 50V		D508	8-719-912-20	DIODE 1SS120	
C915	1-126-059-11	ELECT 10uF 20% 50V		D509	8-719-000-75	DIODE UZL-7L1-TP	
C918	1-126-059-11	ELECT 10uF 20% 50V		D901	8-719-200-82	DIODE 11ES2	
C919	1-126-059-11	ELECT 10uF 20% 50V		D902	8-719-200-82	DIODE 11ES2	
				D903	8-719-200-82	DIODE 11ES2	
C920	1-124-472-11	ELECT 470uF 20% 10V					
C921	1-124-472-11	ELECT 470uF 20% 10V		D904	8-719-200-82	DIODE 11ES2	
C922	1-126-022-11	ELECT 47uF 20% 16V		D905	8-719-200-82	DIODE 11ES2	
C923	1-124-910-11	ELECT 47uF 20% 50V		D906	8-719-200-82	DIODE 11ES2	
C924	1-161-377-00	CERAMIC 0.0047uF 20% 50V		D907	8-719-200-82	DIODE 11ES2	
				D908	8-719-200-82	DIODE 11ES2	
C925	1-126-059-11	ELECT 10uF 20% 50V					
		< CONNECTOR >		D909	8-719-200-82	DIODE 11ES2	
BP1	1-535-139-00	BASE POST 22MM (10MM PITCH) 2P (AEP, UK, Germany, Italian)		D910	8-719-200-82	DIODE 11ES2	
	* 1-535-141-00	BASE POST 22MM (10MM PITCH) 4P (E, Saudi Arabia)		D911	8-719-200-82	DIODE 11ES2	
BP2	* 1-560-595-00	TERMINAL (WITH BASE) (E, Saudi Arabia)		D912	8-719-200-82	DIODE 11ES2	
				D913	8-719-200-82	DIODE 11ES2	
BP3	* 1-560-595-00	TERMINAL (WITH BASE) (E, Saudi Arabia)		D914	8-719-200-82	DIODE 11ES2	
CN1	* 1-564-321-00	PIN, CONNECTOR 2P		D915	8-719-912-20	DIODE 1SS120	
CN101	* 1-564-506-11	PLUG, CONNECTOR 3P		D916	8-719-002-06	DIODE UZL-18L	
CN102	* 1-564-505-11	PLUG, CONNECTOR 2P		D917	8-719-200-82	DIODE 11ES2	
CN103	* 1-564-508-11	PLUG, CONNECTOR 5P		D918	8-719-200-82	DIODE 11ES2	
				D919	8-719-200-82	DIODE 11ES2	
CN201	1-573-520-11	JACK, PIN 4P (LINE)				< FERRITE BEAD >	
CN501	1-569-406-11	SOCKET, CONNECTOR 10P		FB101	1-410-396-41	FERRITE BEAD INDUCTOR	
CN502	* 1-565-561-11	PIN, CONNECTOR 3P (AU BUS)		FB102	1-410-397-21	FERRITE BEAD INDUCTOR	
CN901	* 1-564-506-11	PLUG, CONNECTOR 3P		FB301	1-410-397-21	FERRITE BEAD INDUCTOR	
		< DIODE >		FB501	1-410-397-21	FERRITE BEAD INDUCTOR	
D102	8-713-300-88	DIODE 1T33C-01		FB502	1-410-397-21	FERRITE BEAD INDUCTOR	
D103	8-713-300-88	DIODE 1T33C-01				< IC >	
D104	8-713-300-88	DIODE 1T33C-01		IC101	8-749-921-11	IC GP1F32R (IN/BS)	
D105	8-713-300-88	DIODE 1T33C-01		IC102	8-749-921-11	IC GP1F32R (IN/DAT)	
D201	8-719-912-20	DIODE 1SS120		IC103	8-749-921-11	IC GP1F32R (IN/CD)	
				IC104	8-749-921-12	IC GP1F32T (OUT/DAT)	
D202	8-719-912-20	DIODE 1SS120		IC105	8-759-512-96	IC CXD2905Q	
D203	8-719-912-20	DIODE 1SS120					
D205	8-719-912-20	DIODE 1SS120		IC106	8-759-990-82	IC TL082CP	
D401	8-719-912-20	DIODE 1SS120		IC107	8-759-517-14	IC MB625473PF-G	
D501	8-719-912-20	DIODE 1SS120		IC108	8-752-306-51	IC CX23065A	
				IC201	8-759-634-51	IC M5218AP	
D502	8-719-933-36	DIODE HZS6B1L		IC202	8-759-504-36	IC CS5339-KP	
D503	8-719-912-20	DIODE 1SS120					
D505	8-719-912-20	DIODE 1SS120		IC301	8-759-511-68	IC CXD8245M	
D506	8-719-912-20	DIODE 1SS120		IC302	8-752-331-87	IC CXD1160AP	
D507	8-719-912-20	DIODE 1SS120		IC303	8-752-331-87	IC CXD1160AP	
				IC304	8-759-973-04	IC MSM41464-10RS-K	
				IC305	8-752-341-99	IC CXD2701Q	

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
IC306	8-752-342-65	IC	CXD2560M	Q410	8-729-900-36	TRANSISTOR	DTC124ES
IC401	8-752-343-01	IC	CXD2561M	Q411	8-729-141-30	TRANSISTOR	2SC3623A-LK
IC402	8-759-990-82	IC	TL082CP	Q412	8-729-900-36	TRANSISTOR	DTC124ES
IC403	8-759-634-51	IC	M5218AP	Q413	8-729-900-61	TRANSISTOR	DTA114ES
IC404	8-759-634-51	IC	M5218AP	Q451	8-729-141-30	TRANSISTOR	2SC3623A-LK
IC501	8-759-323-77	IC	HD63B01Y0RAE0P	Q452	8-729-141-30	TRANSISTOR	2SC3623A-LK
IC901	8-759-604-33	IC	M5F7812L	Q453	8-729-141-30	TRANSISTOR	2SC3623A-LK
IC902	8-759-604-51	IC	M5F7912L	Q454	8-729-141-30	TRANSISTOR	2SC3623A-LK
IC903	8-759-231-53	IC	TA7805S	Q459	8-729-119-76	TRANSISTOR	2SA1175-HFE
IC906	8-759-604-33	IC	M5F7812L	Q460	8-729-900-36	TRANSISTOR	DTC124ES
IC907	8-759-231-53	IC	TA7805S	Q461	8-729-141-30	TRANSISTOR	2SC3623A-LK
IC908	8-759-245-79	IC	TA7905S	Q501	8-729-119-76	TRANSISTOR	2SA1175-HFE
ICP901	△1-532-845-41	IC, LINK		Q502	8-729-620-05	TRANSISTOR	2SC2603-EF
ICP902	△1-532-840-41	IC, LINK		Q503	8-729-620-05	TRANSISTOR	2SC2603-EF
ICP903	△1-532-840-41	IC, LINK		Q504	8-729-620-05	TRANSISTOR	2SC2603-EF
ICP904	△1-532-833-41	IC, LINK		Q505	8-729-620-05	TRANSISTOR	2SC2603-EF
		< COIL >		Q901	8-729-118-01	TRANSISTOR	2SB1116-K
L101	1-410-517-11	INDUCTOR	47uH	Q902	8-729-900-36	TRANSISTOR	DTC124ES
L102	1-410-324-11	INDUCTOR	4.7uH	Q903	8-729-118-01	TRANSISTOR	2SB1116-K
L103	1-406-416-11	COIL (OSC)				< RESISTOR >	
L104	1-410-517-11	INDUCTOR	47uH	R101	1-249-425-11	CARBON	4.7K 5% 1/4W
L201	1-410-517-11	INDUCTOR	47uH	R102	1-249-425-11	CARBON	4.7K 5% 1/4W
L301	1-410-517-11	INDUCTOR	47uH	R103	1-249-425-11	CARBON	4.7K 5% 1/4W
L302	1-410-517-11	INDUCTOR	47uH	R104	1-249-433-11	CARBON	22K 5% 1/4W
L303	1-410-517-11	INDUCTOR	47uH	R105	1-249-405-11	CARBON	100 5% 1/4W
L304	1-410-517-11	INDUCTOR	47uH	R106	1-249-405-11	CARBON	100 5% 1/4W
L305	1-410-324-11	INDUCTOR	4.7uH	R108	1-249-413-11	CARBON	470 5% 1/4W
		< FILTER >		R111	1-249-413-11	CARBON	470 5% 1/4W
LF1	1-424-117-11	FILTER, LINE		R112	1-249-411-11	CARBON	330 5% 1/4W
LF101	1-424-543-21	FILTER, NOISE		R113	1-249-425-11	CARBON	4.7K 5% 1/4W
LF102	1-424-544-21	FILTER, NOISE		R114	1-249-421-11	CARBON	2.2K 5% 1/4W
LF501	1-424-543-21	FILTER, NOISE		R115	1-249-431-11	CARBON	15K 5% 1/4W
LF502	1-424-543-21	FILTER, NOISE		R116	1-249-429-11	CARBON	10K 5% 1/4W
		< TRANSISTOR >		R117	1-249-429-11	CARBON	10K 5% 1/4W
Q201	8-729-900-36	TRANSISTOR	DTC124ES	R118	1-249-437-11	CARBON	47K 5% 1/4W
Q401	8-729-141-30	TRANSISTOR	2SC3623A-LK	R119	1-249-437-11	CARBON	47K 5% 1/4W
Q402	8-729-141-30	TRANSISTOR	2SC3623A-LK	R120	1-247-903-00	CARBON	1M 5% 1/4W
Q403	8-729-141-30	TRANSISTOR	2SC3623A-LK	R121	1-249-437-11	CARBON	47K 5% 1/4W
Q404	8-729-141-30	TRANSISTOR	2SC3623A-LK	R122	1-249-433-11	CARBON	22K 5% 1/4W
Q405	8-729-900-63	TRANSISTOR	DTA124ES	R123	1-249-413-11	CARBON	470 5% 1/4W
Q407	8-729-900-63	TRANSISTOR	DTA124ES	R124	1-249-413-11	CARBON	470 5% 1/4W
Q408	8-729-900-63	TRANSISTOR	DTA124ES	R201	1-249-417-11	CARBON	1K 5% 1/4W
Q409	8-729-119-76	TRANSISTOR	2SA1175-HFE	R202	1-249-437-11	CARBON	47K 5% 1/4W
				R203	1-249-425-11	CARBON	4.7K 5% 1/4W
				R204	1-249-418-11	CARBON	1.2K 5% 1/4W

Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

MAIN

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
R205	1-249-405-11	CARBON 100 5% 1/4W		R426	1-249-414-11	CARBON 560 5% 1/4W	
R206	1-249-401-11	CARBON 47 5% 1/4W		R427	1-249-425-11	CARBON 4.7K 5% 1/4W	
R207	1-249-393-11	CARBON 10 5% 1/4W		R428	1-249-420-11	CARBON 1.8K 5% 1/4W	
R208	1-249-433-11	CARBON 22K 5% 1/4W		R429	1-249-441-11	CARBON 100K 5% 1/4W	
R209	1-249-413-11	CARBON 470 5% 1/4W		R430	1-249-441-11	CARBON 100K 5% 1/4W	
R251	1-249-417-11	CARBON 1K 5% 1/4W		R431	1-249-425-11	CARBON 4.7K 5% 1/4W	
R252	1-249-437-11	CARBON 47K 5% 1/4W		R432	1-249-441-11	CARBON 100K 5% 1/4W	
R253	1-249-425-11	CARBON 4.7K 5% 1/4W		R433	1-249-441-11	CARBON 100K 5% 1/4W	
R254	1-249-418-11	CARBON 1.2K 5% 1/4W		R434	1-249-441-11	CARBON 100K 5% 1/4W	
R255	1-249-405-11	CARBON 100 5% 1/4W		R435	1-249-441-11	CARBON 100K 5% 1/4W	
R256	1-249-401-11	CARBON 47 5% 1/4W		R436	1-249-393-11	CARBON 10 5% 1/4W	
R301	1-249-407-11	CARBON 150 5% 1/4W		R437	1-249-433-11	CARBON 22K 5% 1/4W	
R302	1-249-409-11	CARBON 220 5% 1/4W		R438	1-249-429-11	CARBON 10K 5% 1/4W	
R303	1-247-903-00	CARBON 1M 5% 1/4W		R440	1-249-425-11	CARBON 4.7K 5% 1/4W	
R304	1-249-413-11	CARBON 470 5% 1/4W		R441	1-249-429-11	CARBON 10K 5% 1/4W	
R305	1-249-413-11	CARBON 470 5% 1/4W		R445	1-249-425-11	CARBON 4.7K 5% 1/4W	
R307	1-249-413-11	CARBON 470 5% 1/4W		R451	1-249-428-11	CARBON 8.2K 5% 1/4W	
R308	1-249-413-11	CARBON 470 5% 1/4W		R452	1-249-428-11	CARBON 8.2K 5% 1/4W	
R309	1-249-413-11	CARBON 470 5% 1/4W		R453	1-249-428-11	CARBON 8.2K 5% 1/4W	
R310	1-249-413-11	CARBON 470 5% 1/4W		R454	1-249-428-11	CARBON 8.2K 5% 1/4W	
R311	1-249-413-11	CARBON 470 5% 1/4W		R455	1-249-423-11	CARBON 3.3K 5% 1/4W	
R312	1-249-413-11	CARBON 470 5% 1/4W		R456	1-249-423-11	CARBON 3.3K 5% 1/4W	
R313	1-249-413-11	CARBON 470 5% 1/4W		R457	1-249-430-11	CARBON 12K 5% 1/4W	
R314	1-249-413-11	CARBON 470 5% 1/4W		R458	1-249-430-11	CARBON 12K 5% 1/4W	
R315	1-249-413-11	CARBON 470 5% 1/4W		R459	1-249-419-11	CARBON 1.5K 5% 1/4W	
R316	1-249-413-11	CARBON 470 5% 1/4W		R460	1-249-419-11	CARBON 1.5K 5% 1/4W	
R401	1-249-428-11	CARBON 8.2K 5% 1/4W		R461	1-249-419-11	CARBON 1.5K 5% 1/4W	
R402	1-249-428-11	CARBON 8.2K 5% 1/4W		R468	1-249-441-11	CARBON 100K 5% 1/4W	
R403	1-249-428-11	CARBON 8.2K 5% 1/4W		R469	1-249-425-11	CARBON 4.7K 5% 1/4W	
R404	1-249-428-11	CARBON 8.2K 5% 1/4W		R470	1-249-426-11	CARBON 5.6K 5% 1/4W	
R405	1-249-423-11	CARBON 3.3K 5% 1/4W		R471	1-249-425-11	CARBON 4.7K 5% 1/4W	
R406	1-249-423-11	CARBON 3.3K 5% 1/4W		R472	1-249-423-11	CARBON 3.3K 5% 1/4W	
R407	1-249-430-11	CARBON 12K 5% 1/4W		R473	1-249-419-11	CARBON 1.5K 5% 1/4W	
R408	1-249-430-11	CARBON 12K 5% 1/4W		R474	1-249-425-11	CARBON 4.7K 5% 1/4W	
R409	1-249-419-11	CARBON 1.5K 5% 1/4W		R475	1-249-421-11	CARBON 2.2K 5% 1/4W	
R410	1-249-419-11	CARBON 1.5K 5% 1/4W		R476	1-249-414-11	CARBON 560 5% 1/4W	
R411	1-249-419-11	CARBON 1.5K 5% 1/4W		R477	1-249-425-11	CARBON 4.7K 5% 1/4W	
R418	1-249-441-11	CARBON 100K 5% 1/4W		R478	1-249-420-11	CARBON 1.8K 5% 1/4W	
R419	1-249-425-11	CARBON 4.7K 5% 1/4W		R479	1-249-441-11	CARBON 100K 5% 1/4W	
R420	1-249-426-11	CARBON 5.6K 5% 1/4W		R480	1-249-441-11	CARBON 100K 5% 1/4W	
R421	1-249-425-11	CARBON 4.7K 5% 1/4W		R481	1-249-425-11	CARBON 4.7K 5% 1/4W	
R422	1-249-423-11	CARBON 3.3K 5% 1/4W		R485	1-249-441-11	CARBON 100K 5% 1/4W	
R423	1-249-419-11	CARBON 1.5K 5% 1/4W		R487	1-249-433-11	CARBON 22K 5% 1/4W	
R424	1-249-425-11	CARBON 4.7K 5% 1/4W		R488	1-249-429-11	CARBON 10K 5% 1/4W	
R425	1-249-421-11	CARBON 2.2K 5% 1/4W		R490	1-249-425-11	CARBON 4.7K 5% 1/4W	

MAIN

PANEL A

Ref. No.	Part No.	Description	Remarks
R495	1-249-425-11	CARBON 4. 7K 5% 1/4W	
R502	1-249-428-11	CARBON 8. 2K 5% 1/4W	
R503	1-249-420-11	CARBON 1. 8K 5% 1/4W	
R504	1-249-429-11	CARBON 10K 5% 1/4W	
R505	1-249-429-11	CARBON 10K 5% 1/4W	
R506	1-249-429-11	CARBON 10K 5% 1/4W	
R507	1-249-433-11	CARBON 22K 5% 1/4W	
R508	1-249-429-11	CARBON 10K 5% 1/4W	
R509	1-249-429-11	CARBON 10K 5% 1/4W	
R510	1-249-441-11	CARBON 100K 5% 1/4W	
R511	1-249-422-11	CARBON 2. 7K 5% 1/4W	
R512	1-249-425-11	CARBON 4. 7K 5% 1/4W	
R513	1-249-429-11	CARBON 10K 5% 1/4W	
R514	1-249-437-11	CARBON 47K 5% 1/4W	
R515	1-249-425-11	CARBON 4. 7K 5% 1/4W	
R516	1-249-429-11	CARBON 10K 5% 1/4W	
R517	1-249-417-11	CARBON 1K 5% 1/4W	
R518	1-249-425-11	CARBON 4. 7K 5% 1/4W	
R519	1-249-429-11	CARBON 10K 5% 1/4W	
R520	1-249-393-11	CARBON 10 5% 1/4W	
R521	1-249-417-11	CARBON 1K 5% 1/4W	
R522	1-249-425-11	CARBON 4. 7K 5% 1/4W	
R523	1-249-425-11	CARBON 4. 7K 5% 1/4W	
R524	1-249-425-11	CARBON 4. 7K 5% 1/4W	
R904	1-249-428-11	CARBON 8. 2K 5% 1/4W	
R905	1-249-422-11	CARBON 2. 7K 5% 1/4W	
R906	1-249-437-11	CARBON 47K 5% 1/4W	

< SWITCH >

S1 Δ 1-572-716-11 SWITCH, PUSH (AC POWER)

< VIBRATOR >

X101 1-579-069-11 VIBRATOR, CRYSTAL 48.152MHz
 X301 1-577-614-11 VIBRATOR, CRYSTAL 16.345MHz
 X501 1-579-125-11 VIBRATOR, CERAMIC 8MHz

* A-4345-232-A PANEL A BOARD, COMPLETE

* 1-637-045-11 PANEL B BOARD
 * 1-637-939-11 LAMP HOLDER BOARD
 * 4-941-534-01 HOLDER (1), LED
 * 4-941-535-01 HOLDER (2-1), LED
 * 4-941-536-01 HOLDER (3), LED

Ref. No.	Part No.	Description	Remarks
* 4-941-541-01		HOLDER (2-2), LED	
* 4-942-783-01		HOLDER	

< CAPACITOR >

C601	1-126-049-11	ELECT 22uF 20% 25V	
C602	1-126-049-11	ELECT 22uF 20% 25V	
C603	1-136-165-00	FILM 0.1uF 5% 50V	
C604	1-136-165-00	FILM 0.1uF 5% 50V	
C605	1-126-049-11	ELECT 22uF 20% 25V	
C606	1-126-162-11	ELECT 3.3uF 20% 50V	
C607	1-126-049-11	ELECT 22uF 20% 25V	
C608	1-126-049-11	ELECT 22uF 20% 25V	
C609	1-106-351-00	MYLAR 2200PF 5% 200V	
C610	1-106-343-00	MYLAR 1000PF 5% 200V	
C613	1-126-049-11	ELECT 22uF 20% 25V	
C701	1-125-486-11	DUBLE LAYERS 0.22F 5.5V	
C702	1-126-059-11	ELECT 10uF 20% 50V	
C703	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C704	1-126-059-11	ELECT 10uF 20% 50V	
C705	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C706	1-126-059-11	ELECT 10uF 20% 50V	
C707	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C708	1-161-494-00	CERAMIC 0.022uF 25V	
C709	1-161-494-00	CERAMIC 0.022uF 25V	
C712	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C713	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C714	1-126-059-11	ELECT 10uF 20% 50V	
C715	1-126-162-11	ELECT 3.3uF 20% 50V	
C716	1-126-162-11	ELECT 3.3uF 20% 50V	
C717	1-126-162-11	ELECT 3.3uF 20% 50V	
C718	1-126-162-11	ELECT 3.3uF 20% 50V	
C719	1-126-162-11	ELECT 3.3uF 20% 50V	
C720	1-126-059-11	ELECT 10uF 20% 50V	
C721	1-126-059-11	ELECT 10uF 20% 50V	
C722	1-126-049-11	ELECT 22uF 20% 25V	
C723	1-126-059-11	ELECT 10uF 20% 50V	
C724	1-161-494-00	CERAMIC 0.022uF 25V	
C801	1-164-159-11	CERAMIC 0.1uF 50V	

< CONNECTOR >

CN551	1-569-400-11	PLUG, CONNECTOR 10P	
CN701	* 1-568-828-11	SOCKET, CONNECTOR 9P	
CN702	* 1-580-409-11	SOCKET, CONNECTOR 15P	
CN751	* 1-568-828-11	SOCKET, CONNECTOR 9P	
CN801	* 1-564-506-11	PLUG, CONNECTOR 3P	

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

PANEL A

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
< TRANSFORMER >				< IC >			
CP801	1-239-021-11	ENCAPSULATED COMPONENT		IC601	8-759-945-58	IC RC4558P	
< DIODE >				IC602	8-759-991-11	IC XR1091DCP	
D601	8-719-912-20	DIODE 1SS120		IC603	8-759-991-11	IC XR1091DCP	
D602	8-719-912-20	DIODE 1SS120		IC604	8-759-007-19	IC MC74HC4051N	
D603	8-719-933-36	DIODE HZS6B1L		IC605	8-759-007-19	IC MC74HC4051N	
D604	8-719-933-36	DIODE HZS6B1L		IC701	8-759-323-78	IC HD6435328RR05F	
D605	8-719-912-20	DIODE 1SS120		IC702	8-759-502-88	IC SED1330FBB	
D701	8-719-200-82	DIODE 11ES2		IC703	8-759-502-08	IC MSM5165AL-10RS	
D702	8-719-912-20	DIODE 1SS120		IC704	8-759-916-21	IC SN74HC20AN	
D703	8-719-912-20	DIODE 1SS120		IC705	8-759-945-58	IC RC4558P	
D704	8-719-912-20	DIODE 1SS120		IC706	8-759-823-29	IC LA5316M	
D705	8-719-912-20	DIODE 1SS120		< FLUORESCENT TUBE >			
D706	8-719-912-20	DIODE 1SS120		PL801	1-519-653-11	GAS DISCHARGE TUBE, FLUORESCENT	
D707	8-719-912-20	DIODE 1SS120		< TRANSISTOR >			
D708	8-719-912-20	DIODE 1SS120		Q601	8-729-900-36	TRANSISTOR DTC124ES	
D709	8-719-912-20	DIODE 1SS120		Q701	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D710	8-719-912-20	DIODE 1SS120		Q702	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D711	8-719-912-20	DIODE 1SS120		Q703	8-729-620-05	TRANSISTOR 2SC2603-EF	
D712	8-719-912-20	DIODE 1SS120		Q704	8-729-620-05	TRANSISTOR 2SC2603-EF	
D713	8-719-912-20	DIODE 1SS120		Q705	8-729-620-05	TRANSISTOR 2SC2603-EF	
D717	8-719-912-20	DIODE 1SS120		Q706	8-729-620-05	TRANSISTOR 2SC2603-EF	
D721	8-719-301-38	DIODE SEL2210S-C (EFFECT)		Q707	8-729-620-05	TRANSISTOR 2SC2603-EF	
D723	8-719-301-38	DIODE SEL2210S-C (PERSONAL FILE)		Q708	8-729-620-05	TRANSISTOR 2SC2603-EF	
D724	8-719-301-38	DIODE SEL2210S-C (F3)		Q709	8-729-620-05	TRANSISTOR 2SC2603-EF	
D725	8-719-301-38	DIODE SEL2210S-C (MORE 10)		Q710	8-729-620-05	TRANSISTOR 2SC2603-EF	
D726	8-719-301-38	DIODE SEL2210S-C (CONTROL)		Q711	8-729-620-05	TRANSISTOR 2SC2603-EF	
D727	8-719-301-38	DIODE SEL2210S-C (F1)		Q801	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D728	8-719-301-38	DIODE SEL2210S-C (EFFECT LEVEL)		< RESISTOR >			
D729	8-719-301-38	DIODE SEL2210S-C (CHARACTER EDIT)		R601	1-249-439-11	CARBON 68K 5% 1/4W	
D730	8-719-301-38	DIODE SEL2210S-C (F2)		R602	1-249-438-11	CARBON 56K 5% 1/4W	
D731	8-719-301-38	DIODE SEL2210S-C (SELECT 10)		R603	1-249-423-11	CARBON 3.3K 5% 1/4W	
D732	8-719-301-38	DIODE SEL2210S-C (CONTROL)		R604	1-247-899-11	CARBON 680K 5% 1/4W	
D801	8-719-304-37	DIODE SEL4414E-C		R605	1-247-903-00	CARBON 1M 5% 1/4W	
D802	8-719-304-37	DIODE SEL4414E-C		R606	1-249-421-11	CARBON 2.2K 5% 1/4W	
D803	8-719-304-37	DIODE SEL4414E-C		R607	1-249-441-11	CARBON 100K 5% 1/4W	
D804	8-719-304-37	DIODE SEL4414E-C		R608	1-249-425-11	CARBON 4.7K 5% 1/4W	
D805	8-719-304-37	DIODE SEL4414E-C		R609	1-249-425-11	CARBON 4.7K 5% 1/4W	
D806	8-719-304-37	DIODE SEL4414E-C		R610	1-249-419-11	CARBON 1.5K 5% 1/4W	
D807	8-719-304-37	DIODE SEL4414E-C					
D808	8-719-304-37	DIODE SEL4414E-C					

PANEL A

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
R611	1-249-429-11	CARBON 10K 5% 1/4W		R804	1-249-409-11	CARBON 220 5% 1/4W	
R612	1-249-433-11	CARBON 22K 5% 1/4W		R805	1-249-409-11	CARBON 220 5% 1/4W	
R614	1-249-429-11	CARBON 10K 5% 1/4W				< VARIABLE RESISTOR >	
R615	1-249-420-11	CARBON 1.8K 5% 1/4W					
R616	1-249-412-11	CARBON 390 5% 1/4W		RV701	1-238-601-11	RES, ADJ, CARBON 22K	
						< SWITCH >	
R617	1-249-412-11	CARBON 390 5% 1/4W					
R618	1-249-412-11	CARBON 390 5% 1/4W		S700	1-554-303-21	SWITCH, TACTILE (DISPLAY)	
R619	1-249-412-11	CARBON 390 5% 1/4W		S701	1-554-303-21	SWITCH, TACTILE (DIMMER)	
R701	1-249-425-11	CARBON 4.7K 5% 1/4W		S702	1-554-303-21	SWITCH, TACTILE (-)	
R702	1-249-433-11	CARBON 22K 5% 1/4W		S703	1-554-303-21	SWITCH, TACTILE (DEMO)	
				S704	1-554-303-21	SWITCH, TACTILE (+)	
R703	1-249-433-11	CARBON 22K 5% 1/4W					
R704	1-249-422-11	CARBON 2.7K 5% 1/4W		S705	1-554-303-21	SWITCH, TACTILE (EFFECT)	
R705	1-249-422-11	CARBON 2.7K 5% 1/4W		S710	1-554-303-21	SWITCH, TACTILE (EFFECT MODE)	
R706	1-249-402-11	CARBON 56 5% 1/4W		S711	1-554-303-21	SWITCH, TACTILE (OFF)	
R707	1-249-402-11	CARBON 56 5% 1/4W		S712	1-554-303-21	SWITCH, TACTILE (<)	
				S713	1-554-303-21	SWITCH, TACTILE (>)	
R708	1-249-422-11	CARBON 2.7K 5% 1/4W					
R709	1-249-422-11	CARBON 2.7K 5% 1/4W		S714	1-554-303-21	SWITCH, TACTILE (△)	
R710	1-249-422-11	CARBON 2.7K 5% 1/4W		S721	1-554-303-21	SWITCH, TACTILE (5)	
R711	1-249-422-11	CARBON 2.7K 5% 1/4W		S722	1-554-303-21	SWITCH, TACTILE (▽)	
R712	1-249-422-11	CARBON 2.7K 5% 1/4W		S730	1-554-303-21	SWITCH, TACTILE (CHARACTER EDIT)	
				S731	1-554-303-21	SWITCH, TACTILE (4)	
R713	1-249-422-11	CARBON 2.7K 5% 1/4W					
R714	1-249-422-11	CARBON 2.7K 5% 1/4W		S732	1-554-303-21	SWITCH, TACTILE (FLAT)	
R715	1-249-422-11	CARBON 2.7K 5% 1/4W		S733	1-554-303-21	SWITCH, TACTILE (10)	
R716	1-249-433-11	CARBON 22K 5% 1/4W		S734	1-554-303-21	SWITCH, TACTILE (5)	
R717	1-249-433-11	CARBON 22K 5% 1/4W		S735	1-554-303-21	SWITCH, TACTILE (SUB MENU)	
				S740	1-554-303-21	SWITCH, TACTILE (LINEAR)	
R718	1-249-433-11	CARBON 22K 5% 1/4W					
R719	1-249-433-11	CARBON 22K 5% 1/4W		S741	1-554-303-21	SWITCH, TACTILE (3)	
R720	1-249-433-11	CARBON 22K 5% 1/4W		S742	1-554-303-21	SWITCH, TACTILE (SLOPE)	
R721	1-249-433-11	CARBON 22K 5% 1/4W		S743	1-554-303-21	SWITCH, TACTILE (9)	
R727	1-249-425-11	CARBON 4.7K 5% 1/4W		S744	1-554-303-21	SWITCH, TACTILE (4)	
				S745	1-554-303-21	SWITCH, TACTILE (MEMORY)	
R728	1-249-441-11	CARBON 100K 5% 1/4W					
R729	1-249-425-11	CARBON 4.7K 5% 1/4W		S750	1-554-303-21	SWITCH, TACTILE (EXPAND)	
R730	1-249-425-11	CARBON 4.7K 5% 1/4W		S751	1-554-303-21	SWITCH, TACTILE (2)	
R731	1-249-417-11	CARBON 1K 5% 1/4W		S752	1-554-303-21	SWITCH, TACTILE (F3)	
R732	1-249-417-11	CARBON 1K 5% 1/4W		S753	1-554-303-21	SWITCH, TACTILE (8)	
				S754	1-554-303-21	SWITCH, TACTILE (3)	
R733	1-249-433-11	CARBON 22K 5% 1/4W					
R734	1-249-433-11	CARBON 22K 5% 1/4W		S755	1-554-303-21	SWITCH, TACTILE (PERSONAL FILE)	
R735	1-249-433-11	CARBON 22K 5% 1/4W		S760	1-554-303-21	SWITCH, TACTILE (COMPRESS)	
R736	1-249-433-11	CARBON 22K 5% 1/4W		S761	1-554-303-21	SWITCH, TACTILE (1)	
R737	1-249-429-11	CARBON 10K 5% 1/4W		S762	1-554-303-21	SWITCH, TACTILE (F2)	
				S763	1-554-303-21	SWITCH, TACTILE (7)	
R738	1-249-425-11	CARBON 4.7K 5% 1/4W					
R739	1-249-441-11	CARBON 100K 5% 1/4W					
R801	1-249-437-11	CARBON 47K 5% 1/4W					
R802	1-249-426-11	CARBON 5.6K 5% 1/4W					
R803	1-249-421-11	CARBON 2.2K 5% 1/4W					

PANEL A

Ref. No.	Part No.	Description	Remarks
S764	1-554-303-21	SWITCH, TACTILE (2)	
S765	1-554-303-21	SWITCH, TACTILE (MORE 10)	
S770	1-554-303-21	SWITCH, TACTILE (CONTROL)	
S771	1-554-303-21	SWITCH, TACTILE (CONTROL)	
S772	1-554-303-21	SWITCH, TACTILE (F1)	
S773	1-554-303-21	SWITCH, TACTILE (6)	
S774	1-554-303-21	SWITCH, TACTILE (1)	
S775	1-554-303-21	SWITCH, TACTILE (SELECT 10)	
		(VIBRATOR)	
X701	1-577-364-11	VIBRATOR, CERAMIC 12MHz	
X702	1-579-175-11	VIBRATOR, CERAMIC 10MHz	

		MISCELLANEOUS	

5	1-575-216-11	WIRE, FLAT TYPE (9 CORE)	
CNJ101	△1-526-751-00	OUTLET, AC (UK)	
	△1-526-794-11	OUTLET, AC (AEP, Germany, Italian, Saudi Arabia)	
	1-526-882-00	OUTLET, AC (E)	
CNP1	△1-575-651-11	CORD, POWER (AEP, Germany, Italian)	
	△1-575-654-11	CORD, POWER (Saudi Arabia)	
	△1-575-656-11	CORD, POWER (E)	
	△1-575-669-21	CORD, POWER (UK)	
F101	△1-532-259-00	FUSE, TIME-LAG (AEP, UK, Germany, Italian) (1. 5A)	
LCD901	1-809-202-11	DISPLAY PANEL, LIQUID CRYSTAL	
SV701	△1-570-046-21	SWITCH, VOLTAGE CHANGE (E, Saudi Arabia)	
T101	△1-450-596-11	TRANSFORMER, POWER (AEP, Germany, Italian)	
	△1-450-597-11	TRANSFORMER, POWER (UK)	
	△1-450-598-11	TRANSFORMER, POWER (E, Saudi Arabia)	

Ref. No.	Part No.	Description	Remarks
		ACCESSORY & PACKING MATERIAL	

	1-558-271-11	CORD, CONNECTION (AEP, Germany, Italian)	
	1-559-533-11	CORD, CONNECTION (AEP, Germany, Italian)	
	1-574-264-11	CORD, LIGHT PLUG (AEP, Germany, Italian)	
	3-701-630-00	BAG, POLYETHYLENE (Germany, Italian)	
	3-753-428-11	MANUAL, INSTRUCTION (English, French, Spanish, Portuguese) (AEP)	
	3-753-428-41	MANUAL, INSTRUCTION (Germany, Dutch, Swedish, Italian) (AEP, Germany, Italian)	
*	4-941-928-01	CUSHION (FRONT) (UK, E, Saudi Arabia)	
*	4-941-929-01	CUSHION (REAR) (UK, E, Saudi Arabia)	
*	4-944-163-01	CUSHION (AEP, Germany, Italian)	
*	4-946-091-01	INDIVIDUAL CARTON (AEP, Germany, Italian)	

HARDWARE LIST

# 1	7-685-134-19	SCREW +BTP 2. 6X8 TYPE2 N-S
# 2	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.